

Climatological Data for January, 1910.
DISTRICT No. 6, MISSOURI VALLEY.

J. WARREN SMITH, District Editor.

GENERAL SUMMARY.

About the usual winter weather conditions prevailed during January in the Missouri River Watershed. The first half of the month was generally cold and stormy, while the last half was somewhat warmer than usual and mostly fair.

An extensive area of high barometric pressure covered the northwestern part of the district on the 1st and spread south-easterly on the 2d, 3d, and 4th. It caused heavy snow and very low temperature in parts of the mountain States.

An area of low pressure moved easterly over the lower Rocky Mountain district on the 4th, causing much sleet in the lower Missouri Valley and heavy snow in Iowa and South Dakota. On the 5th another high pressure area moved over the mountains from the Pacific and spreading quickly eastward behind the preceding storm caused the lowest temperatures of the month in the central and eastern States.

A barometric depression moved eastward over the lower Rocky Mountains on the 12th and caused heavy snow in Iowa, South Dakota, and Nebraska and rain in Kansas and Missouri. The rainfall was sufficient to break up the ice gorge in the Mississippi River below St. Louis and some of the gorges in the Kansas and Missouri rivers.

After the 14th the high pressure areas were not well defined and the depressions moved eastward over the northern part of this district, and as a result higher temperatures prevailed and there was less precipitation. The storm that developed over northern Iowa on the 26th caused much higher temperature in Missouri and very high winds in Iowa and Missouri. The wind velocity at St. Louis was 50 miles an hour and considerable damage was reported.

The prevailing wind was from the west in Montana, Wyoming, and Colorado and from the northwest in the other States. The wind movement was below the normal in Nebraska and North Dakota.

The sunshine was above the normal in North Dakota and Montana, but was below the normal in the southern part of the watershed.

Wyoming.—Over the central and western portions of that part of the State that is in District No. 6 the temperature averaged much below the normal, the daily deficiency at some stations being from 6° to 10° . Over the eastern counties the deficiency was not so great and in the extreme southeast the temperature was slightly above the normal. The marked deficiency in temperature was due to a cold wave that overspread the State during the first week of the month. The lowest temperature was -37° and was recorded on the 3d at Lovell, in the lowest portion of Wyoming. The temperature remained generally low during the first half of the month but the last half was much warmer. Stormy weather prevailed during the first 3 days of the month, which gave very heavy snow in parts of the Wind River and Big Horn valleys. At Lander the snowfall on the 1st amounted to nearly 18 inches. After this storm the snowfall was light and scattered. Except where the heavy snow fell during the first 3 days, the precipitation for the month was below the normal. Over the central and eastern portions of the State the ranges were cleared of most of the snow by about the middle of the month, so that conditions were much more favorable for stock than they were at the close of December. With favorable weather conditions during the rest of the winter, it is estimated that the loss of range stock due to unfavorable weather in December and the first part of January will not average over 15 per cent.

Montana.—Mild temperatures and fair weather prevailed

during the greater part of January, with about the average wind velocity and sunshine. There was a deficiency in temperature in the extreme southwestern part of the State over the Jefferson, Madison, Gallatin, and upper Yellowstone drainage basins, and a marked excess elsewhere. The temperature was almost continuously much below the normal during the first half of the month, but the excess during the latter half was even more marked. The precipitation was in excess in the extreme southwest where the temperature deficiency was greatest, and there was a marked deficiency in the north where the average temperature was highest. Most of the precipitation fell as snow during the cold period from the 1st to 5th. Light rain fell over most of the district during the period from the 25th to 28th, which is rather a rare occurrence for January.

In some respects the storms prevailing during the first few days of January resulted in the most damaging conditions to railroad interests of any winter storms in many years. The snow that fell during December practically all remained on the ground and was in a loose condition on account of the absence of thawing weather. The heavy fall from January 1 to 3 resulted in an unusual amount of snow on the ground in the southwestern part of the district. The delay in train service began on the 2d, but the greatest trouble was in keeping the roads open after the snowfall had ceased. High winds prevailed from the 5th to the 7th, especially in the upper Yellowstone Valley, and the loose snow was blown rapidly into the cuts, completely blocking traffic for several days. The most serious blockade was between Livingston and Billings. Near Gray Cliff the Northern Pacific tracks were covered to a depth of 12 feet or more for a distance of 1 mile. It required a large force of men working about 60 hours to open the road at this point. A serious wreck of a passenger train on the Great Northern road was caused by a snowdrift near Oxford, on the 6th. Traffic on the Montana railroad, between Harlowtown and Lewistown, was practically suspended from the 4th to the 8th, due to the constant drifting of the snow into the cuts.

Gerald Walker, a homesteader, lost his life in a severe storm near Judith Gap on the 1st. The deep snow on the ranges from the 1st to the 15th resulted in great suffering to live stock, although the loss to stockmen was principally in the added expense of feeding cattle and sheep, due to the inaccessibility of the ranges. In most of the mountain districts of the State there is sufficient snow to insure a normal flow of water in most streams. The only notable exception to this is in the main range at the headwaters of the Milk River, Sun River, and Marais River drainage basins, where there is a deficiency in the snowfall.

The following are extracts from reports of engineers in Montana regarding the effect of weather conditions during the month on the work under their supervision:

HUNTLEY, MONT. PROJECT.

From the 15th to the end of the month the weather was quite favorable and warm. No repair work of any nature was attempted during the month, however, owing to the depth of frost in the ground.—*E. B. LeClaire, Huntley, Mont.*

SUN RIVER PROJECT.

The weather was exceptionally mild, with the exception of the first four days, which were stormy and quite cold, thus for the most part affording the best possible conditions for engineering and construction work on the Sun River Project in this locality. Many settlers on the project were engaged in plowing the latter part of the month, which is somewhat unusual during this season and the ground was in a very suitable condition for this work and also for earthwork excavation.—*F. F. Smith, Fort Shaw, Mont.*

MILK RIVER PROJECT.

During the first half of the month the weather was quite cold, and on account of the frozen condition of the ground no grading work was possible in January. Conditions were favorable to other construction work, and considerable concrete was placed at such times as it was considered safe to undertake this work.

GREAT NORTHERN RAILWAY.

During the first quarter of the month the weather caused no delay in construction work, excepting in earth and hard pan excavation which is always rendered more difficult by low temperatures. During the second quarter the temperature was above zero most of the time, and about half the days were clear, conditions being excellent for grading work. There were six days of rain and heavy snow in the mountains during the third quarter, and much of the snow was melted by the rain and warm weather. The stormy conditions interfered with grading operations, and caused two snow slides, one of which came down at a point where a cut is being made. The work on this has been abandoned till thawing weather begins. During the fourth quarter there were 3 days of rain and 4 with snow, with temperatures ranging from 17° to 36° . These conditions were favorable to snowslides, several of which occurred, but only indirectly caused delays in grading work. One of these slides covered the main line for some 300 or 400 feet to a depth of 50 feet, making it necessary for contractors to come to the aid of the operating department in clearing the main line in order that traffic might be resumed.—*Geo. B. Eddy, Engineer in Charge, Summit-Java Revision Work, Fielding, Mont.*

North Dakota.—The weather during January was favorable for outdoor work, for railway traffic, and for the comfort of live stock. The mean temperature was 10.4° , or 1.1° higher than the normal. The temperature was below the normal during the first half of the month, and during the first 6 days the temperature was exceptionally low. During the last half of the month the temperature averaged considerably above the normal, and during the last 3 days it was unseasonably high. The precipitation was somewhat unevenly distributed geographically, the heaviest being recorded in the extreme western part of the district. The greatest portion of the precipitation fell in the form of snow. The first 7 days were stormy, and the amounts in many instances being quite heavy. The average precipitation for the district, 0.42 inch, was 0.14 inch below the normal. The average depth of snowfall was 4.9 inches. The wind movement was below the average and there was very little drifting of snow. The sunshine was slightly above the normal.

South Dakota.—Stormy, unfavorable, and unseasonably cold weather, with temperatures frequently below zero, prevailed until the 15th, but it was milder with the temperature almost continuously above the normal after that date. The average temperature for the State, especially in the counties east of the Missouri River, was slightly below the normal, although at most of the regular Weather Bureau stations which have the longest records the average was above the normal. The average precipitation, 1.23 inch, was about 0.60 inch above the normal, and was the greatest January fall in 21 years, with one exception. The snowfall averaged 13.4 inches and was heaviest in the Black Hills district. Snows occurred frequently and the precipitation was nearly all in this form. The precipitation was general and the snowfall was heavy in places on the 2d, 4th, 12th, and 17th, and moderate to heavy snow fell in the western counties on the 26th and 29th. A general and dry snow occurred on the 12th, the amount in most counties being moderate to heavy. High wind following this snow caused the railroads much trouble and delay in the operation of trains, especially in the eastern counties and the Black Hills district. The gathering of corn yet remaining in the fields at the close of December was necessarily slow and tedious, owing to the snow in the fields and the bad wagon roads due to drifting.

Live stock on the open ranges in the western counties suffered, an unusual amount of feeding from granary and stack was necessary, and where hay was scarce and the stock had to depend largely upon dry range grass, there was considerable loss. Cold weather, snow, frozen ground, and the bad condition of the wagon roads caused much delay in the work being done on the United States Reclamation Project at Belle

Fourche, S. Dak., and municipal work, such as constructing sewers, etc., in the eastern portion of the State was prosecuted with difficulty. The poor condition of the roads caused a material reduction in the receipt of grain at the elevators. Mining interests in the Black Hills district were hindered by the heavy snow. Sleighing was possible during practically all the month. About the middle of the third decade damage was done to telegraph and telephone wires in the eastern part of the State by rain and mist freezing to the wires and followed by high winds. There was considerable foggy weather, rather less than the normal sunshine, and less than the usual amount of strong wind.

Colorado.—During the first few days of the month the weather was somewhat warmer than usual, and from the 10th to the close of the month mild temperatures obtained. Temperatures below zero were common from the 4th to 9th, with the coldest weather on the 6th. The precipitation was rather unevenly distributed. In the eastern counties most of the precipitation occurred in the first 4 days, with light scattered amounts during the last half of the month. The average precipitation was slightly below the normal and the sunshine was very close to the normal. The snowfall was less than the normal in the mountains of the South Platte Basin. The warm spell at the beginning of the month caused a general settling of the snow and some melting, but with the return to normal temperature conditions much of the snow was solidly frozen, and is now in a condition favorable to late melting. In many places high winds caused large well-packed drifts in the gulches.

Nebraska.—January, 1910, in Nebraska was nearly a normal month. The coldest period was during the first 9 days, when minimum temperatures below zero were common. The rest of the month the temperature was about, or slightly above, normal. The precipitation, 0.69 inch, was slightly above normal and most of it occurred in the 3 storms of the 4th, 12th, and 29th. On the 12th rain fell at many southern stations. Principally because of the heavy snowfall in December, 1909, the ground was covered with snow practically all the month in the eastern counties and until the 15th or 20th in the western. The sunshine was below the normal, and the average wind movement, 9.1 miles an hour, is about 0.4 mile below the average for January for the past 16 years.

Iowa.—The first 10 days of January were unseasonably cold, but the remainder of the month, with the exception of 2 or 3 days, was mild, so that the average temperature for the month varied but slightly from the normal. The 6th and 7th were the coldest days. There were only 2 or 3 days in the month on which the minimum temperature was above the freezing point. The precipitation was above the normal, except in the west-central districts where there was a slight deficiency. Most of it fell in the form of snow during 2 storms, one on the 4-5th and the other on the 12-13th. The fall of snow during these 2 storms was unusually heavy and caused much delay in railroad traffic, which, together with the severe cold weather during the early part of the month, came very near causing a fuel famine in this State. In many instances the railroad companies abandoned all freight traffic, except coal, and cleared the snow from the tracks as rapidly as possible, and even then the coal had been exhausted in many towns before a new supply could be delivered. The ground was thoroughly covered with snow during the entire month in the northern and most of the month in southern districts, and as a result fall grains suffered no injury from the effects of the cold weather.

Kansas.—The month was cold and wet, with the sunshine somewhat below the normal. Cold weather as in December continued through the first decade of January, the lowest temperature of the month occurring on the 5th in the western counties and on the 6th in the eastern. The temperature moderated after the 10th and was above the normal from the 15th to 28th. Nearly all the precipitation fell during the first 15 days. The

precipitation was above the normal in the Blue, Kansas, and Marais des Cygnes valleys, and in the larger part of the Smoky Hill Valley. The country roads were nearly impassable most of the month and railroad transportation was seriously impaired, as all trains were delayed more or less by the weather and mails were quite late. Building and farm operations were stopped. Wheat generally shows little effect of adverse weather, although in some localities it has been badly injured and the roots have been worked out of the ground by frost. It has been quite impossible to gather the corn still in the fields. Young alfalfa has been injured and peaches are generally reported killed.

The Blue, Republican, and Solomon rivers remained frozen until the 27th, and the Smoky Hill River until the 25th. The ice in the Kansas and Marais des Cygnes rivers was broken up on the 13th by the rain of the 12th and dangerous gorges were formed. All of the bridges across the Kaw and the Wakarusa rivers in Shawnee and Douglas counties were badly injured, except 5 Kaw bridges in Topeka and 1 in Lawrence, which were saved by the liberal use of dynamite. It is estimated that it will require \$30,000 to repair the bridges in Shawnee County alone. One ice gorge plowed out the ground and broke some of the water mains leading to the city water works, and made it necessary to use the river water direct. The ice gorges caused the flooding of much lowland and shut the Atchison, Topeka and Santa Fe Railway out of the use of its tracks between Topeka and Lawrence for 2 weeks.

Missouri.—The month opened mild, but a cold wave spread over the State on the 3d–4th and cold weather prevailed until the 11th. The mean temperature was near the normal, but probably because of the irregularity in snow covering the temperature varied a good deal at even near-by stations. The precipitation was in excess in the Grand and Missouri basins, but was deficient in the Osage and Gasconade valleys. The total snowfall ranged from less than 1 inch in parts of the Ozark region to over 10 inches in the northwestern counties. The snow remained on the ground most of the first half of the month in the Grand and Missouri valleys. There was less sunshine than usual and the humidity was slightly above the average.

The weather was generally unfavorable for building and other outdoor occupations. The transportation and distributing lines of business were interfered with to some extent during the first half of the month by snow and sleet, especially over the more northern part of the State. Navigation continued closed during the first 15 or 20 days of the month.

TEMPERATURE.

The temperature was slightly above the normal in the extreme northern part of this district and in the extreme lower part of the Missouri Valley, and it was about the normal in most of the central part of the district. The highest temperature was 78° at Warsaw, Mo., on the 25th, while maximum temperatures above 60° were recorded in all of the States except Iowa and North Dakota. The lowest temperature was –37° at Lovell, Wyo., on the 3d. The temperature was below –30° in Montana, North Dakota, South Dakota, and Iowa, and below –20° in the other States.

PRECIPITATION.

The precipitation was generally above the normal in the eastern part of this district and below the normal in most of the western part. It was the greatest in South Dakota in any January, with one exception, in 21 years. The precipitation was mostly in the form of snow and the ground was well covered by snow, except in the southern part of the district. The greatest monthly precipitation was 4.59 inches at Dumont, S. Dak., and the greatest amount in any 24 consecutive hours was 2.24 inches at Norris, Mont. The greatest monthly snowfall was 43.0 inches at Grayling, Mont.

RIVERS.

Most of the rivers in the upper part of the Missouri Water-

shed remained frozen throughout the month. The ice began breaking up in the Kansas and other rivers in Kansas on the 13th and caused considerable damage in Shawnee and Douglas counties.

An ice gorge formed in the Mississippi River below St. Louis in December, and by January 12 a solid gorge extended much of the way from Chester, Ill., to above St. Louis. This gorge dammed the water back as far up the river as Grafton, Ill., and caused an average river stage of 18.3 feet for St. Louis for the month. On the 12th heavy rain and high temperature softened the ice and on the 13th it started moving. The water rose steadily as gorges were reformed below the city until it reached a stage of 31.9 feet at 1:00 a. m. on the 14th. It was above the flood stage but a few hours, but the heavy ice crowded the boats in the local harbor so far ashore that when the water fell most of them were left on the levee. Damage was done to nearly every water craft and the large excursion steamer *City of Providence* was so injured that in the attempt to float the boat she filled and sank. The loss on this boat is estimated at about \$65,000, while the general damage is reported to be the greatest experienced in this harbor in recent years.

While part of the Missouri River was open during much of the month it was practically closed in the vicinity of Kansas City until the 26th. When the gorges moved out of the Kansas River on this date further damage was done to bridges between Kansas City and Topeka. The government boat *Atlanta* was sunk at Missouri City, in the Missouri River, about 13 miles below Kansas City. The loss was about \$8,000. The work on the Terminal Railway piers at Kansas City was interrupted by floating ice that made it impossible to keep barges in place and at the end of the month this work had not been resumed.

MISCELLANEOUS.

The weather was generally favorable for winter grains and grass fields and for fruit, except some damage to wheat and alfalfa in Kansas by lack of snow covering, and to peaches in the same State by the low temperature. The horticulturist at the Missouri Experiment Station reports peach buds practically uninjured.

Range stock had to be fed much more than usual and there was considerable loss reported. The following reports from the superintendents of Indian agencies show the general condition of range stock:

Wind River Agency, Wyoming.—The weather has been unprecedented in many respects. The month began with about a foot of snow on the ground, and on the 2d nearly 20 inches more fell. This did not perceptibly melt until near the close of the month when the amount on the ground was reduced to about 8 inches. Stock of all kinds has suffered very much, and the loss in cattle, horses, and sheep will probably exceed that for any previous year since 1885.

Cheyenne River Agency, South Dakota.—During the first half of the month the weather was cold and stormy and high winds and snow prevailed, causing a slight loss of cattle on the range, and having a weakening effect on surviving animals. The weather during the last half was clear and mild, causing the snow to melt, and making it possible for the range cattle to find forage.

Crow Creek Agency, South Dakota.—The heavy fall of snow made it very bad for cattle as they could not get enough to eat. The horses fare all right as they will dig for a living. We have not lost any cattle to speak of yet (January 29), but if the bad weather with deep snow continues we will have to sell one-half of the cattle on the reservation before spring.

Rosebud Agency, South Dakota.—The heavy snows have made it extremely difficult for cattle to secure forage. This condition was aggravated by thawing and freezing which resulted in an almost unbreakable crust on the top of the snow.

Some work was possible on most of the United States Reclamation projects in this district. The Shoshone Dam at the Wyoming Shoshone Project was completed at 2 a. m. on the 16th. This is reported to be the highest storage dam in the world and will allow for the irrigation of approximately 132,000 acres of land near Cody, Wyo. This dam is 85 feet long at the bottom and 200 feet at the top. It is 328 feet high. It is estimated that it will take two years to fill the reservoir.

Railroad traffic was greatly interfered with in nearly all parts of the district during the first part of the month. In addition to the reports made by the section directors, the following are extracted from special letters from different railway and other officials:

Engineer, Missouri District, Chicago, Burlington and Quincy Railroad.—The weather during the month did not have any particularly favorable or unfavorable effect upon the interests under my supervision.

Chief Engineer, Kansas Railway Construction Company.—The weather conditions have not had any special effect unless it might be an indirect one that the farmers in western Kansas and Nebraska consider the heavy snowfall as practically assuring a large wheat crop and will have a favorable bearing on all crops.

Chief Engineer, Missouri, Kansas and Texas Railway.—We were compelled to suspend our work getting sand for filling our North St. Louis yards on account of running ice. It was too cold, also, to make concrete foundations with convenience. Otherwise the weather was very good so far as our work is concerned.

General Manager, St. Louis Southwestern Railway.—The weather had an unfavorable effect upon our business, because of its severity. Outdoor work was delayed and in consequence less loading and greater delay in unloading shipments occurred. The moisture affected our roadbed somewhat.

Superintendent, Terminal Railroad Association, St. Louis.—The inclement weather that existed during December and the early part of January seriously interfered with and delayed the business, not only of our companies, but of all railroads in this territory. The snow caused switches to operate with difficulty, and the freezing rain, particularly on January 4, was very annoying. The reliable forecasts which we have been able to procure from your Bureau have been particularly beneficial to us.

Chief Engineer, Wabash Railroad.—The severe cold weather of the month was particularly hard on railroads as traffic can not be moved at anywhere near the same speed as it can in good weather.

Tait-Nordmeyer Engineering Company.—The month of January was fairly good for carrying on building work, especially concrete work. Work under our supervision in Colorado has not progressed as well as in Missouri and Illinois, owing to a little colder weather.

Engineer, Bell Telephone Company of Missouri.—We have not observed anything unusual in the effect of the weather conditions on our outside construction.

Vice-President, Simmons Hardware Company.—The weather during the month of January, as a whole, had a favorable effect upon our business, as the generally open weather and the lack of heavy precipitation accompanied by snowstorms made it possible for the farmers to come to town and do business with the retail dealers, who are our customers. On the other hand, business men were hampered a good deal during December by the very heavy snowstorms and the wet weather, which kept the farmers at home and affected the transportation of merchandise by the railroads and made it impossible for the farmers to gather the corn still remaining in the fields.

Department of Civil and Irrigation Engineering, Fort Collins, Colo.—For several years we have had very mild winters and have been troubled with destructive insects the following summers. It is hoped that the severe winter so far will have killed the worst of the insect pests.

In addition to the reports of snow in the mountain districts by the section directors the following by Mr. W. B. Freeman,

District Engineer of the United States Geological Survey, will be of value:

In the vicinity of Denver there were no heavy snowstorms during the month, but the weather was uniformly cold, so that there was very little melting of the December snows.

On the 31st of January I went up on the watershed of the Geneva Creek tributary of the South Platte to an altitude of about 10,000 feet. The ground was partly bare and the snow was more or less drifted in spots. I should judge that the average depth of snow on the surface between altitude of 8,000 and 10,000 feet was only about 2 inches. On the northern slope of the hills the average depth was considerably greater than this, but on the southern slopes there was practically no snow. There is of course an abundance of snow above the altitude of 11,000 feet.

I am of the impression that there was a much heavier snowfall on the headwaters of the Big Horn. I spent 3 weeks of December and 3 weeks of January in Montana and the snowfall was greater on the 3 headwater tributaries of the Missouri River, as far as I could learn, than it had been for a number of years. I look for the streams during 1910 to be unusually high in that section, and also in the Big Horn drainage.

On the North Platte and South Platte drainage area the waters during 1909 were the highest which we have had for some time. There is not near as much snow on the ground now as there was at this time last year on this drainage. But on account of the heavy December snowfalls in the high mountains, and from present indications I expect that the season of 1910 will be second only to 1909 in magnitude of run-off for the past 5 years.

The State game warden of South Dakota states that many reports were received of the death of prairie chickens, grouse, and quail, because of their inability to secure food.

One of the most important engineering problems confronting the States bordering the Missouri River is the drainage of the bottoms or lowland districts near the river. A contract has just been let for the construction of a ditch in Woodbury County, Iowa, for \$80,000 which will be of great benefit to that county but will complicate drainage matters in Monona County, the next one south.

The Governor of Missouri states that there are over 3,000,000 acres of swamp or flooded land in that State.

A large drainage project has recently been completed in southwestern Bates County, Mo., on the lower Marais des Cygnes and upper Osage rivers that is expected to drain 41,350 acres in that county. These lands have been subjected to spring overflows and it is hoped to prevent the floods. The district is 24 miles long and from 2 to 6 miles wide. The main new channel is 23.5 miles long and takes the place of the old river channel 23 miles in length. The new channel is 64 feet wide for the first 19 miles and 90 feet wide the rest of the distance. The fall is 26 inches per mile the entire length of the ditch. Twenty-two miles of lateral ditches are being cut. The cost of this main ditch is \$370,000.

MONTHLY WEATHER REVIEW.

JANUARY, 1910

TABLE 1.—Climatological data for January, 1910. District No. 6, Missouri Valley.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.				Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.		Lowest.		Greatest daily range.		Total.	Departure from the normal.	Greatest in 24 hours.		Total snowfall unmeted.	Number of rainy days.	Number of clear days.	Number of partly cloudy days.			
						Date.	Date.	Date.	Date.	Greatest in 24 hours.	Total.			Greatest in 24 hours.	Total.							
<i>Wyoming.</i>																						
Arapahoe.	Fremont.	2																			David Malloy.	
Barnum.	Johnson.	5,500	5																		Thomas Freegaard.	
Basin.	Johnson.	3,862	11	6.8	- 9.8	41	24	- 34	3	44	0.75	- 0.07	0.60	8.0	2	28	2	1	w.	O. J. Robertson.		
Bennett.	Carbon.	2																			Chas. C. Young.	
Big Creek Station.	Albany.																				U. S. Forest Service.	
Casper.	Natrona.	5,101	2	25.8	+ 1.2	51	23	- 26	3	48	0.25	- 0.11	0.20	2.5	2	18	1	13	sw.	M. C. Cook.		
Cheyenne.	Laramie.	6,088	39	26.8	- 1.8	58	24	- 10	3	45	0.29	- 0.30	0.14	2.9	5	9	14	8	nw.	U. S. Weather Bureau.		
Chugwater.		5,282	9	25.9		60	24	- 21	3	44	0.30		0.20	3.0	2					George Milne.		
Clark.	Big Horn.	4,320	4	24.0		55	31	- 17	3	48	0.42		0.25	8.0	2	10	15	6	w.	Chas. A. C. Snow.		
Cody.		5,000	3	21.7		56	31	- 24	3	39	0.30		0.30	3.0	1	16	15	0	sw.	F. A. Fish.		
Crystal Lake Reservoir.	Laramie.	6,900	1			53	24													Cheyenne City Engineer.		
Dome Lake.	Sheridan.	8,821	2	16.4		43	23	- 20	2	45	0.90		0.40	9.0	3	6	22	3	sw.	Chas. Hidley.		
Douglas.		4,793	1	25.5		53	24	- 25	3	33	0.69		0.23	4						Henry C. Miller.		
Dubois.	Converse.	6,900	3	17.8		48	23†	- 22	3	41	1.25		0.90	12.5	3	5	16	3	nw.	Dr. F. H. Welty.		
Eaton's Ranch.	Sheridan.	4,600	5	28.3		65	31	- 13	3	54	1.50		0.70	15.0	5	26	25	0	w.	F. A. Eaton.		
Echeta.	Crook.	4,200	1																	M. R. Hunter.		
Elk Mountain.	Carbon.																			Wm. Richardson.		
Encampment.		7,322	1	24.0		48	23	- 12	5	29	0.60		0.20	7	14	9	7	sw.	U. S. Forest Service.			
Ervay.	Natrona.	1	20.0			44	22	- 18	3	41	0.50		0.21	7.0	4	20	7	4	sw.	Frank Jameson.		
Fort Laramie.	Laramie.	4,270	32	22.0	- 3.0	62	31	- 16	3	48	0.28	- 0.17	0.25	7.2	3	19	9	3	w.	John Hunton.		
Fox Creek Station.	Albany.			16.8		41	23	- 19	6	38	0.64		0.51	6.4	3	22	3	6	w.	U. S. Forest Service.		
Gillette.	Crook.	4,546	3	21.2		46	24	- 16	3	46	0.50		0.10	5.0	0	15	11	5	sw.	S. D. Perry.		
Granite Canyon.	Laramie.	7,337	5																	Lee A. Boyce.		
Hunters' Station.	Johnson.	8,000	4	18.8		47	23	- 19	4	48	0.47		0.21	9.0	5	28	1	2	w.	U. S. Forest Service.		
Hyattville.	Big Horn.	4,632	11	19.2	- 4.7	49	23	- 25	3	39	0.70		0.40	6.5	4	19	9	8	w.	Wm. Booth.		
Kiriley.	Converse.	6,000	6	20.9	- 1.3	48	28	- 16	3	42	0.78	+ 0.28	0.40	6.5	4	19	9	3	nw.	D. M. Zum Brunnen.		
Kirwin.	Big Horn.	9,187	2	11.7		40	23	- 21	6	42	2.65		1.40	26.5	7	10	10	8	w.	C. L. Tewksbury.		
Knowles.	Crook.																			G. A. Knowles.		
Lander.	Fremont.	5,372	18	11.8	- 5.0	50	24	- 32	3	38	2.06	+ 1.63	1.72	20.6	6	11	15	5	n.	U. S. Weather Bureau.		
Laramie.	Albany.	7,198	19	24.0	+ 0.7	50	23†	- 13	5	37	0.19	- 0.07	0.14	2.0	3	14	13	4	sw.	University of Wyoming.		
Leo.		6,878	9	21.0	- 0.8	51	11	- 15	5	44	0.84	+ 0.21	0.23	9.0	10	12	7	12	sw.	C. A. Cowdin.		
Lolobama Ranch.	Big Horn.	7,052	6	13.9	- 5.0	44	23	- 25	4	39	0.45	- 0.18	0.35	11.0	2	9	18	4	w.	Mary E. Painter.		
Lovell.		5	10.6			45	24	- 37	3	42	0.27		0.18	5.5	3	12	10	9	n.	R. Fred Harrison.		
Lusk.	Converse.	5,007	20			57	25	- 14	3	35	0.10		0.10	3.0	1					D. E. Goddard.		
Luther.	Laramie.	1	24.1																	Henry D. Colburn.		
Manville.	Converse.	5,050	1																	C. A. Sherman.		
Moocroft.	Crook.	4,211	7	17.2	- 2.2	46	24	- 30	3	48	0.40	- 0.08	0.20	4.0	3	23	8	0		James K. Somers.		
Moore.		6,000	9	28.1	+ 0.3	55	24†	- 13	4	62	0.21	- 0.17	0.18	2.4	3	6	17	5	w.	Edwin Moore.		
Newcastle.	Weston.	4,319	3	21.0		51	24	- 21	3	40	1.85		0.30	18.5	11	10	14	7	nw.	Dr. S. W. Johnson.		
Pathfinder.	Natrona.	5,735	4	22.1	- 3.9	51	23	- 25	3	40	0.32	- 0.05	0.24	11.0	5	23	8	4	w.	U. S. Reclamation Service.		
Phillips.	Laramie.	4,900	7	23.4	+ 0.2	64	24	- 15	3	37	0.25	- 0.32	0.20	2.5	2	22	5	4	w.	Mrs. Arthur Rugg		
Pine Bluff.		5,038	9																	Sumner Miller.		
Powell.	Big Horn.	4,376	3	14.4		49	24	- 28	3	40	0.03		0.03	0.5	1	17	13	1	w.	U. S. Reclamation Service.		
Rawlins.	Carbon.	6,748	8	23.6	+ 0.7	46	24†	- 9	5	33	0.18	- 0.36	0.05	0.05	2.0	6	15	10	6	w.	C. J. Ehrenfeld.	
Riverton.	Big Horn.	4,989	2																	Fred L. McGiffin.		
Saratoga.	Carbon.	7,300	12	23.6	+ 2.4	51	23	- 14	13	40	0.36	- 0.41	0.13	3	12	10	8	e.	Saratoga & Enc'mt Ry.			
Sheridan.	Sheridan.	3,790	15	19.4	0.0	55	24	- 27	3	44	0.31	- 0.52	0.29	8.7	3	9	17	5	sw.	U. S. Weather Bureau.		
Shoshone Dam.	Big Horn.	5,385	4	27.0 ^a		56 ^a	31	- 29 ^a	3	44	0.63 ^a	- 0.52	0.38 ^a	7.0 ^a	2	11 ^a	18 ^a	1 ^a	w.	U. S. Reclamation Service.		
Soldiers Home.		4,635	18	26.0	+ 2.6	66	24	- 12	3	47	0.40	- 0.01	0.30	4.0	2	8	21	2	sw.	Geo. L. Courtney.		
South Pass City.	Fremont.	7,373	8	12.1		39	23	- 31	6	39	1.31		0.79	11.8	9	11	9	7	sw.	John Sherlock.		
Thermopolis.		4,350	6	15.9		52	24	- 35	3	45	0.32		0.30	4.0	2	24	4	3	sw.	A. L. Dubig.		
Upton.	Weston.																			G. E. McPherrin.		
Valley.	Big Horn.	6,500	1																	Jas. L. McLaughlin.		
Verona.	Sheridan.																			O. A. Roode.		
Wiley.	Big Horn.	5,375	1	32.8		54	23	- 25	3	33	0.30		0.30	3.0	1	21	8	2	w.	C. D. Marshall.		
Wynete.	Laramie.	4,207	3	24.0		60	24	- 14	3	47	0.10		0.10	2.0	1	17	13	1	nw.	U. S. Reclamation Service.		
Yellowstone Park.	National Park.	6,300	22	15.8	- 1.8	42	24	- 15	6	29	1.90	- 0.34	0.94	22.0	16	3	8	20	s.	U. S. Weather Bureau.		
(1) Fountain Hotel.		7,220	4	9.9		40	23†	- 36	5	47	2.49	- 0.37	2.97	8	7	11	12	sw.	U. S. Army.			
(2) Grand Canyon.		7,733	6	7.4		38	31	- 36	3	42	3.10	- 0.28	3.00	30.0	6	4	5	22	w.	Do.		
(3) Lake Hotel.																				Do.		
(4) Norris Gey. Basin.																				Do.		
(5) Riverside.																				Do.		
(6) Soda Butte.																				Do.		
(7) Sylvan Pass.																				Do.		
(8) Thumb.																				Do.		
(9) Tower Falls.																				Do.		
(10) Upper Gey. Basin.																				Do.		
Montana.	Dawson.	2	17.8			42	22	- 19	3	45	T.		T.	1.2	0	13	9	9	nw.	W. B. Ennis.		
Adel.	Cascade.	5,200	11	22.3	+ 0.2	49	31	- 16	3	42	1.30	+ 0.28	0.40	13.0	4	12	19	7	w.	Bessie F. Burch.		
Agricultural College.	Gallatin.	4,700	12	18.2	- 3.3	47	22†	- 22	3	30	0.82	+ 0.05	0.55	9.0	7	5	18	8	sw.	J. L. McCraw.		
Augusta.	Lewis & Clark.	4,371	12	24.2	+ 2.0	57	23	- 23	3	38	0.26	- 0.40	0.10	2.0	3	22	6	3	w.	C. C.		

TABLE 1.—Climatological data for January, 1910. District No. 6—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeted.	Number of rainy days, .01 inch or more.	Number of partly cloudy days.	Number of clear days.			
Montana—Cont'd.																				
Cut Bank.	Teton.	3,700	12	24.0	+ 4.8	53	23	-12	3	39	T.	- 0.60	T.	0	19	9	1	w.	Chas. N. Thomas.	
Degker.	Rosebud.	3,400	6	6.8	.....	40	28†	-35	1	32	0.20	0.20	0.2	1	6	18	7	w.	Adam Anderson.
Delpine.	Meagher.	5,000	.....	.....	.....	.....	.....	.....	.....	0.47	.....	0.40	10.2	3	6	18	7	w.	T. B. Holliday.
Denton.	Fergus.	.....	2	.....	.....	.....	.....	.....	.....	0.47	.....	0.40	10.2	3	6	18	7	w.	R. M. Chamberlain.
Dillon.	Beaverhead.	5,147	13	19.8	- 3.8	51	24	-21	3	37	1.19	+ 0.29	0.40	11.7	9	8	13	10	sw.	J. E. Monroe.
Dirty Creek.	Meagher.	6,000	.....	.....	.....	.....	.....	.....	.....	0.76	.....	0.43	16.1	4	17	6	8	nw.	Lewis Cameron.
Dry Creek.	Broadwater.	5,503	1.00	0.42	19.6	9	15	9	7	sw.	J. C. Stuart.
Dry Wolf Camp.	Cascade.	6,000	.....	.....	.....	.....	.....	.....	.....	0.96	.....	0.28	13.5	8	9	11	4	w.	Mrs. R. J. Eveleth.
East Gallatin River.	Gallatin.	6,000	.....	.....	.....	.....	.....	.....	.....	0.88	.....	0.26	19.4	9	9	10	12	sw.	John Eberhart.
Ekalaka.	Custer.	6,576	1	22.1	+ 2.0	50	24	-23	3	55	0.43	- 0.32	0.09	24.0	7	8	19	4	w.	Wm. Freese.
Elkhorn.	Jefferson.	4,900	3	13.2	.....	47	31	-31	3	44	0.29	0.15	2	18	6	7	7	w.	James Heagan.
Evans.	Cascade.	2,218	6	13.2	.....	57	23	-13	3	39	0.02	0.02	1.5	1	21	3	2	w.	H. Tharsher.
Fallon.	Custer.	3,950	1	25.8	.....	42	23	-22	2	29	0.95	0.55	23.5	2	21	8	2	w.	Mrs. A. C. Gifford
Family's.	Silver Bow.	8,500	.....	15.4	.....	.....	.....	.....	.....	0.61	.....	0.40	12.3	3	19	8	4	w.	U. S. Reclamation Service.
Fish Creek**.	Carbon.	5,000	.....	.....	.....	.....	.....	.....	.....	1.32	.....	0.27	12.3	7	8	15	nw.	O. B. Tilton.	
Flathead Creek.	Gallatin.	6,000	.....	.....	.....	.....	.....	.....	.....	0.30	.....	0.30	7.0	4	10	11	11	w.	O. E. Haskin.
Forsyth.	Rosebud.	2,514	4	21.1*	.....	59*	23	-30*	3	45*	0.75	0.15	3.1	4	15	8	8	sw.	L. G. Brown.
Fort Benton.	Chouteau.	2,630	39	26.2	+ 7.8	50	22†	-9	3	32	0.44	- 0.28	0.34	2.0	2	18	7	6	sw.	W. F. Clarke.
Fort Shaw.	Cascade.	3,500	22	27.6	+ 6.2	57	31	-18	3	37	0.05	- 0.56	0.03	0.9	2	20	8	3	sw.	Jens Sullivin.
Fort W. H. Harrison.	Lewis & Clark.	4,004	6	15.6	.....	62	24	-29	3	47	.....	.....	1.14	36.1	7	17	11	w.	U. S. Reclamation Service.
Foster.	Yellowstone.	19.9	.....	.....	.....	53	31	-36	3	50	0.35	0.15	3.1	4	15	8	8	sw.	Post Hospital.
Garnell.	Fergus.	5,501	1	19.3	.....	46	31	-20	3	36	0.42	0.30	14.0	3	9	11	11	nw.	E. K. Bowman.
Glendive.	Dawson.	2,069	20	16.0	+ 2.6	46	31	-23	3	39	0.20	- 0.54	0.07	4	16	12	3	w.	Thos. E. Scally.	
Goldbutte.	Chouteau.	3	20.3	.....	.....	47	23†	-14	2	36	0.24	0.15	4.0	4	11	13	7	sw.	W. B. Walker.
Graham.	Custer.	4	21.3	.....	.....	50	24	-22	3	42	0.61	0.28	8.5	6	7	14	10	nw.	J. T. Berthiotte.
Grayling.	Gallatin.	6,700	4	8.6*	.....	40*	31	-35*	5	54	2.85	0.72	43.0	9	34	10	17	w.	J. S. Rue.
Great Falls.	Cascade.	3,350	19	28.8	+ 4.0	56	31	-7	1	27	0.36	- 0.28	0.21	3.0	4	13	14	4	sw.	P. Kerzenmacher.
Half Moon Pass.	Fergus.	6,500	.....	.....	.....	.....	.....	.....	.....	0.61	.....	0.40	2.4	8	2	27	2	w.	S. H. Bauman.
Half Way House.	Broadwater.	6,000	.....	.....	.....	.....	.....	.....	.....	3.05	.....	1.14	36.1	7	17	8	6	sw.	Thos. Stigen.
Harlowton.	Meagher.	4,185	2	14.8*	.....	52*	23	-23*	5	43	0.35	0.27	3.7	3	0	30	1	w.	Gordon Deans.
Hassel.	Broadwater.	5,200	.....	.....	.....	.....	.....	.....	.....	0.44	- 0.25	0.12	3.4	5	9	11	11	sw.	Joseph Muir.
Havre.	Chouteau.	2,505	30	22.4	+ 8.9	52	22	-8	3	42	0.80	- 0.13	0.49	12.8	7	8	11	12	w.	E. C. Albrecht.
Helena.	Lewis & Clark.	4,110	30	19.4	- 0.6	53	31	-21	3	37	0.63	0.23	7.4	3	15	6	10	sw.	U. S. Weather Bureau.	
Highwood.	Chouteau.	3	.....	.....	.....	.....	.....	.....	.....	0.58	.....	0.33	7.5	3	9	10	12	e.	W. S. McCord.
Home Park.	Yellowstone.	3,014	4	21.2	.....	52	24	-24	3	44	0.47	0.47	9.0	1	10	1	10	nw.	H. L. Miller.
Huntley.	Gallatin.	6,830	5	21.2	.....	49	22	-16	11	46	0.09	0.09	1.2	6	23	6	2	w.	Jas. McCune.
Jones Canyon.	Dawson.	5	.....	.....	.....	.....	.....	.....	.....	0.50	.....	0.40	6.2	2	19	7	5	se.	W. C. Henderson.
Jordan.	Kleinsmith Creek.	6,000	1	.....	.....	.....	.....	.....	.....	0.86	0.60	14.3	5	4	25	2	w.	Mrs. E. W. Mills.	
Lewistown.	Fergus.	4,010	13	25.1	+ 2.9	60	23	-20	3	35	1.40	+ 0.48	0.70	13.0	5	13	5	nw.	W. W. Watson.	
Livingston.	Park.	4,488	13	26.0	+ 0.4	54	22	-9	2†	37	1.35	+ 0.70	1.04	15.0	6	14	7	10	sw.	Lewis Terwilliger.
Lodge Pole Creek.	Sweetgrass.	5,700	5	29.6	63	23	-17	3	34	1.47	0.70	0.73	18.3	5	10	20	1	w.	F. G. White.
Lone Tree.	Chouteau.	5	29.6	.....	.....	49	22	-16	11	46	0.80	0.58	17.7	4	10	19	2	w.	E. M. Mason.
Lost Horse Creek.	Meagher.	5,800	3	17.2	51	31	-15	2†	38	0.76	- 0.13	0.68	7.5	3	15	6	2	sw.	U. S. Reclamation Service.
Maita.	Valley.	2,240	3	17.2	49	22	-16	11	46	0.09	0.45	13.2	4	10	21	9	1	sw.	F. E. Parent.
Meadow Creek.	Madison.	6,703	5	21.2	.....	48	22	-13	3	44	2.53	2.24	18.0	4	17	7	7	s.	E. J. Parkinson.
Melstone.	Fergus.	2,903	.....	.....	.....	49	22	-22	3	43	1.45	0.95	18.2	4	18	4	9	sw.	Leon B. Clarke.
Mildred.	Custer.	2,371	19	20.2	+ 5.7	52	22	-21	3	30	0.94	+ 0.32	0.32	10.8	9	14	10	7	s.	U. S. Weather Bureau.
Miles City.	Park.	5,500	1	.....	.....	54	22	-9	2†	37	0.97	0.57	10.8	5	16	9	6	sw.	W. H. Edick.
Moore.	Fergus.	3	51	31	-15	2†	38	0.76	- 0.13	0.62	13.0	3	13	6	2	w.	Clyde Grove.
Mudd Creek.	Deer Lodge.	4,845	4	21.2	.....	48	22	-13	3	44	2.53	2.24	18.0	4	17	7	7	s.	Emory Mudd.
Norris.	Madison.	4,066	2	23.4	.....	49	22	-22	3	43	1.45	0.95	18.2	4	18	4	9	sw.	Madison River Power Co.
Nye.	Sweetgrass.	7,000	1	.....	.....	50	25	-20	8	44	0.47	0.20	2.5	4	20	3	3	sw.	F. L. Bryant.
Olsen Creek.	Jefferson.	6,345	1	.....	.....	49	22	-22	3	43	1.45	0.95	18.2	4	18	4	9	sw.	Robt. Olsen.
Pipestone Pass.	Poplar.	7,000	1	50	25	-24	3	50	1.05	0.27	- 0.34	15	2	27	1	3	w.	Mrs. Theola Kiermeyer.
Poplar.	Raymond.	2,020	25	11.5	+ 5.0	46	22	-24	3	50	0.27	- 0.34	0.15	2.5	2	27	1	3	w.	H. M. Coxier.
Red Lodge.	Teton.	4,260	.....	.....	.....	58*	31	.....	.....	0.14	.....	0.08	1.7	3	10	7	3	w.	W. H. Campbell.
Reese Creek.	Carbon.	5,548	10	20.2	- 2.2	51	31	-15	2†	38	0.76	- 0.13	0.68	7.5	3	13	9	6	se.	I. A. Draper.
Renova.	Gallatin.	5,000	51	31	-30	4	44	0.59	+ 0.11	0.30	6.0	2	10	6	5	sw.	Henry Cramer.
Rimini.	Jewis & Clark.	7,900	2	19.8	- 3.9	51	31	-30	4	44	0.59	+ 0.11	0.30	6.0	2	10	6	5	sw.	F. B. Elmer.
Ryegate.	Yellowstone.	3,640	1	53	31	0.75	0.45	13.2	4	10	21	9	1	nw.	Milo Brooks.
Sedan.	Gallatin.	3,155	2	19.0	.....	44	21	-20	3	36	0.70	0.33	10.8	5	5	21	5	sw.	H. W. Scherbenberg.
Springbrook.	Dawson.	9	.....	.....	.....	.....	.....	.....	.....	0.53	.....	0.22	9.0	3	15	1	15	w.	Mrs. H. L. Miller.
Three Forks.	Lewis & Clark.	4,500	.....	.....	.....	.....	.....	.....	.....	0.53	.....	0.22	9.0	3	15	1	15	w.	J. W. Hardgrove.
Tokna.	Gallatin.	4,066	5	14.3	.....	50	25	-20	8	44	0.47	0.20	2.5	4	20	3	3	sw.	A. A. Adams.
Townsend.	Broadwater.	2,050	1	.....	.....	50	25	-20	8	44	0.54	0.23	18.9	9	18	10	3	w.	U. S. Reclamation Service.
Trail Creek.	Park.	3,790	1	.....	.....	50	25	-20	3	34	1.31	0.34	8.0	7	14	15	2	sw.	Andrew Wiedenbauer.
Utica.	Fergus.	5,000	16	25.7	+ 2.3	55	23	-20	3	36	1.20	+ 0.54	0.54	30	2	27	1	3	w.	P. W. Korell.
Valentine.	.....	4	23.2	.....	54	24	-23	3	42	0.18	0.15	2.2	2	22	1	8	w.		

TABLE 1.—Climatological data for January, 1910. District No. 6—Continued.

Stations	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, .01 inch or more.	Number of partly cloudy days.	Number of clear days.		
<i>North Dakota—Cont'd.</i>																			
Jamestown.....	Stutsman.....	1,390	22	8.2	+ 0.1	39	31	-31	4	45	0.40	-0.23	0.15	4.0	4	8	17	6	nw.
Lamoine.....	Kidder.....	2	7.5			40	31	-30	3	43	0.30		0.10	3.0	3	22	4	5	nw.
Lamoure.....	Lamoure.....	1,307	3																
McHenry.....	Eddy.....	1,509	1	8.0		36	31	-27	3	37	0.14		0.05	1.4	4	11	13	w.	
Manfred.....	Wells.....	1,605	8	9.3		40	31	-30	3	43	0.20		0.10	2.0	2	11	17	3	nw.
Marmarth.....	Bowman.....	2	6.5 ^b			35	19	-26	4	39	0.05		0.08	10.7	7	16	7	8	sw.
Marstonmoor.....	Stutsman.....	2,295	13	15.5	-0.2	46	31	-30	4	48	0.81	+ 0.15	0.41	8.1	4	13	7	9	nw.
Medora.....	Billings.....	1,590	12	10.2 ^a	+ 3.1	44 ^a	31	-27 ^a	3	41 ^a	T.	-0.32	T.	0					e.
Melville.....	Foster.....	3	9.8			47	19 ^a	-23	2	36	0.74		0.25	14.0	6	19	4	8	nw.
Mott.....	Hettinger.....	18	6.2	+ 0.2		38	31	-30	4	45	0.35	-0.26	0.10	3.5	4	17	5	9	sw.
Napoleon.....	Logan.....	2,400	14																
New England.....	Hettinger.....	2,163	3	11.6		44	31	-20	4	46	0.22		0.08	2.5	6	13	12	6	sw.
New Salem.....	Morton.....					43	31	-22	8	40	0.90		0.40	8.0	4	15	10	6	nw.
Orange.....	Adams.....																		
Palermo.....	Ward.....	2,290	6																
Schafer.....	McKenzie.....	1	16.3			48	31	-14	41	51	0.28		0.10	2.8	4	19	9	3	w.
Steele.....	Kidder.....	1,857	14	8.0	+ 0.7	38	23	-27	4	31					10	7	14	sw.	
Swartwood.....	Bowman.....	2																	
Washburn.....	McLean.....	1,731	6	8.4 ^b		49 ^b	18	-26 ^b	3	56 ^b	0.08		0.03	1.8	3	13	15	3	w.
Williston.....	Williams.....	1,875	3	11.0		41	22	-18	12	46	0.27		0.10	2.7	5	6	13	12	sw.
Wishek.....	McIntosh.....	2,010	5	9.9		40	31	-27	4	39	0.40		0.25	4.0	3	14	6	11	nw.
<i>South Dakota.</i>																			
Aberdeen.....	Brown.....	1,300	20	8.9	-1.8	39	22	-22	4	40	0.52	-0.34	0.20	5.2	4	15	9	7	sw.
Academy.....	Charles Mix.....	11	16.2	-4.3	4.3	42	31	-19	5	34	1.10	+ 0.08	0.55	13.5	5	14	9	8	nw.
Alexandria.....	Hanson.....	1,352	21	12.2 ^b	-3.1	37 ^b	22	-29	6	39 ^b	1.58	+ 1.05	0.98	21.0	2	13	13	5	se.
Armour.....	Fall River.....	3,557	1																
Belle Fourche.....	Douglas.....	1,521	15	17.3	-0.8	56	19	-24	4	47	1.71	+ 1.19	0.80	17.0	7				
Bowdle.....	Butte.....	3,000	2	23.8		56	24	-19	3	58	0.64		0.21	8.7	5	2	18	11	nw.
Brookings.....	Edmunds.....	1,995	15																
Burke.....	Brookings.....	1,636	21																
Canton.....	Gregory.....	2	17.0			42	19	-22	4	40	1.05	+ 0.69	0.50	10.8	9	6	20	5	nw.
Cascade Springs.....	Lincoln.....	1,248	15	15.4	-2.7	49	19	-30	6	44	0.55	+ 0.04	0.55	13.5	3	20	7	4	
Castlewood.....	Fall River.....	3,422	2	20.5		55	31	-21	3	46	1.20		0.80	12.6	4	17	6	8	nw.
Centerville.....	Hamlin.....	1,685	4	11.9		35	22	-23	6	35	0.25		0.10	2.5	5	9	8	14	nw.
Chamberlain.....	Turner.....	1,220	13	14.5		41	19	-31	6	37	1.63	+ 0.55	0.40	10.3	7	0	9	22	
Clark.....	Brule.....	1,383	13	15.0 ^b	-5.1	43 ^b	22	-20 ^b	5	39 ^b	1.00	+ 0.64	0.44	14.0	3	12	11	8	sw.
Clear Lake.....	Clark.....	1,770	16	10.2	-1.8	39	19	-23	4	36	1.05	+ 0.60	0.56	10.5	7	11	11	9	nw.
Cottonwood.....	Deuel.....	1,800	7																
Daviston.....	Stanley.....																		
Deadwood.....	Perkins.....																		
Lawrence.....	Perkins.....																		
De Smet.....	Pennington.....	4,535		25.8		55	21	-14	3	52	2.97		1.65	24.5	6	19	7	5	
Dowling.....	Kingsbury.....	6,000	17	12.2 ^a	-1.0	36	19	-32 ^a	6	44 ^a	2.60	+ 1.55	0.60	20.0	5	14	11	6	nw.
Dumont.....	Stanley.....	2,250		20.8		47	22 ^a	-18	5	42	1.60		0.50	16.5	7	13	11	7	nw.
Elk Mountain.....	Lawrence.....	6,195																	
Elk Point.....	Custer.....	4,700																	
Ellington.....	Union.....	1,127	11																
Engewood.....	Perkins.....																		
Eureka.....	Stanley.....	5,723																	
Faulkton.....	Stanley.....	1,884	1	12.2		43	31	-22	4	35	0.60		0.40	9.5	5	14	7	7	nw.
Flandreau.....	Faulkton.....	1,505	15	11.3	+ 0.1	38	22	-19	4	34	0.21	-0.13	0.16	5.8	2	22	7	7	w.
Forestburg.....	Moody.....	1,565	20	14.0	+ 0.6	37	11	-26	6	40	0.70	+ 0.30	0.30	7.0	3	16	7	8	s.
Fort Meade.....	Sanborn.....	1,231	18	12.7	-0.7	39	22	-32	6	36	2.64	+ 2.05	2.00	26.4	3	14	12	5	nw.
Frederick.....	Meade.....	3,624	28	27.4	+ 6.2	63	24	-11	3	61	0.57	-0.14	0.20	8.5	6	18	9	4	w.
Harvey's Ranch.....	Brown.....	1,371	3	8.4 ^c		41 ^c	18	-30 ^c	4	49 ^c	0.44		0.24	5.0	2	18	5	8	sw.
Hermosa.....	Buffalo.....	12	13.2	-2.7		38	22	-22	6	35	1.27		0.50	12.7	6	18	5	8	nw.
Greenmount.....	Lawrence.....	6,430																	
Greenwood.....	Charles Mix.....	16	19.2	-2.6		49	22	-19	5	51 ^a	3.81	1.00	+ 0.46	10.0	4	14	11	6	e.
Hardy Ranger Station.....	Lawrence.....	6,600																	
Harvey's Ranch.....	Charles Mix.....	16	19.2	-2.6		49	22	-19	5	51 ^a	3.81	1.00	+ 0.46	10.0	4	14	11	6	e.
Hermosa.....	do.....	6,282																	
Hill City.....	Custer.....	3,273	4	24.9		60	24	-18	5	40	0.71		0.39	8.8	4	21	8	2	sw.
Hopewell.....	Hyde.....	1,890	14	12.0	-2.2	39	31	-18	8	37	0.82	+ 0.57	0.28	9.3	6	11	12	5	nw.
Howard.....	Stanley.....	5,067																	
Howell.....	Miner.....	1,564	18	10.4 ^d	-3.6	34 ^d	17	-30 ^d	6	33 ^d	1.42	+ 1.17	0.90	16.5	6	18	7	7	nw.
Hand.....	Beadle.....	8	9.4			40	19	-24	14	41	1.31		0.34	11.8	8	19	7	5	nw.
Huron.....	Edmunds.....	1,336	28	11.2	+ 1.7	38	22	-29	6	33	1.40	+ 0.08	1.10	19.9	9	10	9	12	nw.
Ipswich.....	Kadoka.....	1,530	13	9.8	-2.1	38	22	-22	4	35	0.30	-0.14	0.26	3.0	2	21	2	8	nw.
Kadoka.....	Stanley.....	2,467	10.6			46	24	-20	5	43	0.82		0.30	10.0	5	13	13	5	nw.
Kennebec.....	Lyman.....	1,680	17	14.6	-2.5	43	31	-23	5	37	1.70	+ 1.33	0.50	17.0	7	19	6	8	nw.
Kidder.....	Marshall.....	1,295	6	11.1 ^b		39 ^b	25	-30 ^b	4	31 ^b	0.54		0.20	5.1	4	13	3	15	nw.
Kimball.....	Brule.....	1,788	21	14.0	-2.1	40	17	-22	5	38	0.59	+ 0.05	0.34	6.5	2	24	1	6	nw.
La Delle.....	Spink.....	1,403	13	9.8	-3.6	33	16	-36	6	31	0.79	+ 0.08	0.40	10.0	5	13	9	9	nw.
Leads.....	Lawrence.....	5,200		24.5		54	25	-13	2	56	2.38		0.96	24.2	11	7	19	5	nw.
Lemon.....	Perkins.....	2,345	1	14.0		44	31	-17	8	36	0.80		0.20	8.0	6	15	7	9	nw.
Leslie.....	Stanley.....	14	22.0 ^b	+ 3.4		49 ^b	23	-21	10 ^b	30 ^b	4.70		1.54						

TABLE 1.—*Climatological data for January, 1910. District No. 6—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeted.	Number of rainy days, clear days.	Number of partly cloudy days.	Number of cloudy days.			
<i>South Dakota—Cont'd.</i>																				
Stephan.	Hyde.	1,840	6	11.5	-1.4	45	31	-20	6	45	0.68	+0.08	0.25	7.0	5	13	7	11	nw.	
Tama.	Meade.	1	16.1	50	22	-21	3	35	1.18	0.40	11.3	10	9	9	13	nw.	J. J. Daly.			
Vale.	Butte.	2,765	21.7	62	24	-17	3	48*	0.88	0.22	8.2	7	6	10	nw.	U. S. Reclamation Service.				
Vermillion.	Clay.	1,222	9	18.2	50	19	-17	5†	38	0.96	0.36	8.5	4	15	6	10	nw.	Prof. E. C. Perisho.		
Water's Ranch.	Lawrence.	4,000									0.80	0.32	10.8	5	16	5	10	sw.	George Waters.	
Watertown.	Codington.	1,735	16	12.9	+1.9	36	22	-21	4	39	T.	-0.52	T.	0	9	7	15	ne.	Robert Q. Wood.	
Wentworth.	Lake.	1,717	17	13.0*	+0.5	44*	1	-22	6	40	1.58	+1.19	0.61	15.8	6	12	8	11	nw.	R. C. Zimmerman.
Wessington Springs.	Aurora.	1,410	11															F. N. Dunham.		
White Lake.	Yankton.	1,646																Mrs. G. A. Rogers.		
Yankton.		1,234	36	17.4	+1.9	49	19	-16	5	39	1.13	+0.60	0.60	10.0	3	10	5	16	nw.	U. S. Weather Bureau.
<i>Minnesota.</i>	Pipestone.																	W. S. Campbell.		
<i>Colorado.</i>	Pipestone.	1,710	11	11.6		35	19	-22	6	34	1.68	+1.46	0.63	20.0	5	13	12	6	nw.	
Akron.	Washington.	4,650	8															Ira M. Barnhouse.		
Park.	Park.	10,238	13															F. H. Clark.		
Arriba (near).	Lincoln.	5,238	4	27.5		65	31	-13	5	44	0.76	+0.08	0.51	13.0	3	18	0	13	w.	C. S. Graves.
Auldhurst.	Teller.	8,500																Mrs. Alice A. Auld.		
Barker.	Boulder.	8,300	3															Eastern Colo. Power Co.		
Boreas.	Park.	11,489																Frank Soper.		
Boulder.	Boulder.	5,347	14	30.6	-3.1	65	24	-8	2	37	0.26	-0.16	0.20	4.0	1	15	16	0	w.	S. A. Giffin.
Burlington.	Kit Carson.	4,106	6	27.4		65	24	-6	5†	34	0.65		1.5	2	20	7	4	nw.	C. Creglow.	
Cassells.	Park.	8,445																Harriet M. Cassell.		
Castle Rock.	Douglas.	6,220	18	29.8	+2.2	62	24	-10	6	51	0.10	-0.31	0.10	1.0	1	1	1	1	sw.	Chas. Hy. Ellis.
Cheesman.	Jefferson.	6,890	7	31.6		62	24	-8	6	43	T.	T.	0	24	5	2	sw.	C. L. Adams.		
Cheyenne Wells.	Cheyenne.	4,279	18	27.4	-1.3	68	24	-5	5	40	T.	-0.14	T.	0	23	4	4	n.	J. B. Robertson.	
Como.	Park.	9,785	10															Edwin Pike.		
Cope.	Washington.	12		26.6	-3.0	62	25	-10	5	36	0.48	+0.15	0.13	4.0	2	13	10	8	nw.	A. A. Williams.
Corona.	Grand.	11,660	3	8.8		31	23†	-27	6	26	3.62		0.68	38.9	13	2	14	14	w.	U. S. Weather Bureau.
Denver.	Denver.	5,272	38	31.6	+2.5	64	24	-7	5	40	0.16	-0.26	0.15	2.3	2	14	3	3	sw.	Do.
Edgewater.		5,450	2	28.5		70	24	-12	5	52								Dr. J. B. Fish.		
Estes Park Fish Hatchery.	Larimer.	8,900																Gaylord H. Thomson.		
Fort Collins.	Larimer.	4,985	31	25.3	-1.2	64	24	-21	5	51	0.29	-0.17	0.22	4.1	4	19	8	4	nw.	Colorado Agri. College.
Fort Morgan.	Morgan.	4,319	12	23.8	-1.7	66	24	-20	5	46	0.05	-0.08	0.05	1.0	1	20	3	8	nw.	Della M. Scott.
Frances.	Boulder.	9,300	5	23.4		53	1	-10	6	30	0.45		0.22	7.5	3	9	22	0	w.	D. A. Barry.
Fry's Ranch.	Larimer.	7,500		26.6		55	31	-10	6	40	0.70		0.24	6.5	5	18	8	5	w.	Norman W. Fry.
Georgetown.	Clear Creek.	8,550	9															H. L. Corbett.		
Greely.	Weld.	4,649	18	25.5	-0.7	67	24	-17	5	38	0.18	-0.01	0.15	2.5	4	24	3	4	c.	Nelson Reynolds.
Hartsel.	Park.	7,670																Eunily Kleinknecht.		
Hawthorne.	Boulder.	6,000	2															B. E. Cheebro.		
Holyoke (near).	Phillips.	3,745	14															A. C. Cauble.		
Idaho Springs.	Clear Creek.	7,534	10	28.6	+0.4	58	31	-6	6	40	0.08	-0.25	0.05	1.0	2	10	3	8	w.	J. J. Willis.
Kossler.	Boulder.	7,720	3															Central Colo. Power Co.		
La Porte.	Larimer.	5,053	19															P. A. Taft.		
Le Roy (near).	Logan.	4,380	20															Chas. Green.		
Longmont.	Boulder.	4,980	8	29.6		67	31	-10	6	46	0.07		0.06	2.0	2	20	5	6	nw.	Geo. W. Johnson.
Long's Peak (near).	Larimer.	8,600	15	25.4	+2.0	51	24	-9	6	39	0.45	-0.06	0.27	0.0	0	14	3	3	nw.	Enos A. Mills.
Moraine.		6,775	20	26.7	+1.7	49	23†	-8	5	34	0.32	-0.22	0.10	4.5	5	13	12	6	w.	J. D. Stend.
Platte Canyon.	Jefferson.	5,402	11															Denver Union Water Co.		
St. Cloud.	Larimer.	7,750	7															Mrs. E. R. Bristol.		
Sedgwick.	Clear Creek.	3,573	2	23.1		61	31	-6	3	37	0.20		0.20	3.0	1	15	1	1	nw.	Dr. Edwin Lewis.
Sill Mine.	Larimer.	11,500	1	13.8		33	23	-24	6	34	2.61		0.67	29.7	3	17	7	7	nw.	Chas. F. Deininger.
Spicer (near).	Larimer.	8,700																Frank W. Murphy.		
Sterling.	Logan.	3,892		23.0		61	31	-10	5	40	0.01		0.01	0.3	1	17	9	5	se.	Great Western Sugar Co.
Waterdale.	Larimer.	5,206	7	29.2		65	24	-11	6	51	0.16		0.16	2.0	2	10	7	14	nw.	P. H. Boothroyd.
Westlake.	Boulder.																	G. E. Richardson.		
Wray.	Yuma.	3,512	14	25.9	-3.6	64	31	-7	5	38	0.15	-0.19	0.15	2.0	2	10	16	5	w.	J. C. Tuopney.
Yuma.	Yuma.	4,138	19															Geo. W. Custer.		
<i>Nebraska.</i>																				
Ainsworth.	Brown.	2,521	5	20.2		48	25	-22	5	39	0.75	+2.1	0.40	7.5	4	15	3	13	sw.	John M. Cotton.
Albion.	Boone.	1,747	12	21.4	-1.8	46	22	-12	5	44	0.75	+0.12	0.30	4.0	3	14	7	10	nw.	F. M. Weitzel.
Alliance.	Boxbutte.	3,968	15															J. A. Keegan.		
Alma.	Harlan.	1,939	13	22.8	-4.4	52	31	-17	5	36	0.41	+0.12	0.30	4.0	3	14	7	10	nw.	W. A. Sharpnack.
Anoka.	Boyd.	4	13.8															W. Whitla.		
Arcadia.	Valley.	2,186	11															Jas. L. Owen.		
Ashland.	Saunders.	1,100	27	21.4	-2.4	45	19	-14	6	34	0.87	+0.27	0.41	14.0	3	18	9	4	nw.	Dr. A. S. von Mansfelder.
Ashton.	Sherman.	2,061	17															F. Rein.		
Atkinson.	Holt.	2,108	4	18.1		44	31	-21	5	36	0.82		0.50		5	13	12	6	nw.	Chas. J. Wilson.
Auburn.	Nemaha.	1,051	18	24.2	-1.4	49	25	-17	6	31	0.96	+0.11	0.51	8.0	5	8	12	11	nw.	J. R. Huffman.
Aurora.	Hamilton.	1,792	15	22.4	-3.6	46	23	-15	5	36	0.35	+0.07	0.20	3.5	2	16	10	5	nw.	Chi., Burl. & Quincy R. R.
Beatrice.	Gage.	1,235	19	22.8	-2.4	47	19	-23	5	37	1.05	+0.49	0.60	9.0	3	15	4	12	nw.	Wm. S. Waxham.
Beaver City.	Furnas.	2,147	19	24.0	-4.4	49	31	-10	5	28	0.19	-0.05	0.19	2.0	1	7	14	10	ne.	T. M. Davis.
Bellevue.	Sarpy.	2,120	28	22.9		47	20	-14	5	31	1.30	+0.35	0.70	8.4	4	20	1	10	ne.	Prof. A. A. Tyler.
Benkelman.	Dundy.	2,968	13															R. D. Druliner.		
Bertrand.	Phelps.	2,515	2															W. F. Dobbin.		
Blair.	Washington.	1,122	15	22.4	-0.8	46	19	-18	6	36	0.55	+0.12	0.50	5.5	2	7	15	9	nw.	H. H. Hahn.
Bloomfield.	Knox.	4	18.2															J. M. Barnard.		
Bradshaw.	York.	1,715	11	23.6	-2.3	62	24†	-14	3	42	0.40	+0.22	0.40	6.5	3	17	6	8	nw.	E. C. Roggy.
Bridgeport.	Morrill.	3,658	14	23.6	+1.4	60	26	-18	13	49	0.22	+0.05	0.12	4.0	2	19	9	3	nw.	Robt. H. Willis.
Brokenbow.	Custer.	2,477	15	26.6	+1.4	52	25	-27	5	54	0.98									

MONTHLY WEATHER REVIEW.

JANUARY, 1910

TABLE 1.—*Climatological data for January, 1910. District No. 6—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
Nebraska—Cont'd.																			
Enderslake	Brown	1																G. W. Chappell.	
Ewing	Holt	1,888	18	17.5	-1.5	45	19	-19	5	40	1.10	+ 0.69	0.50	11.0	3	7	13	nw.	G. H. Benson.
Fairbury	Jefferson	1,316	35	24.9	-1.5	53	25	-15	6	37	1.26	+ 0.51	0.44	6.5	2	18	10	nw.	W. F. Cramb.
Fairmont	Fillmore	1,641	17	19.8	-4.4	43	25	-18	5	39	0.97	+ 0.34	0.40	7.0	2	24	0	s.	Chi., Burl. & Quincy R. R.
Fort Robinson	Dawes	3,784	26	26.6*	+ 3.4	57	24	-12	3	40	0.21	- 0.45	0.17	2.0	2	10	11	nw.	Post Hospital.
Franklin	Franklin	1,820	19	22.0*	-2.9	50	23	-18	5	36	0.80	+ 0.39	0.40	7.0	3	15	5	w.	D. T. Shoemaker.
Fremont	Dodge	1,203	30	21.0	+ 1.6	44	19	-19	6	46	0.30	- 0.08	0.61	7.0	3	11	11	nw.	Ernest Hahn.
Fullerton	Nance	1,629	8	20.7*	-2.0	46	22	-19	5	38	0.08	-	0.41	6.5	2	17	8	nw.	Dr. F. W. Johnson.
Geneva	Fillmore	1,633	20	22.0	-2.7	44	1	-16	5	40	0.94	+ 0.50	0.60	9.0	3	13	7	nw.	F. M. Flory.
Genoa	Nance	1,584	35	20.8	+ 1.1	44	22	-17	5	35	0.68	0.00	0.30	7.0	4	8	14	nw.	F. W. Parsons.
Gordon	Sheridan	3,550	8								1.75	+ 1.21	0.75	11.8	4	10	20	1	G. F. Williams.
Gosper	Gosper										0.14	-	0.09	3.5	2	12	7	12	E. H. Stoll.
Gothenburg	Dawson	2,557	16	23.1	-2.2	48	23	-11	5	40	0.50	+ 0.07	0.30	5.0	2	13	4	14	Dr. W. J. Bartholomew.
Grand Island	Hall	1,860	19	22.9	-2.0	47	23	-12	6	32	0.61	+ 0.11	0.30	4.0	1	11	10	w.	E. A. Barnes.
Grant	Perkins	3,405	7	22.8		60	31	-8	5	37	0.20	-	0.20	2.0	1	16	7	8	Cyrus Carver.
Greeley	Greeley	2,121	15	20.2		44	23	-11	5	29	1.08	+ 0.71	0.58	10.8	3	11	10	nw.	W. E. Morgan.
Guiderock	Webster	1,646	10								0.90	+ 0.36	0.40	7.0	3	11	7	13	J. S. Marsh.
Haiger	Dundy	3,258	15								0.00	- 0.17	0.00	0.0	0	16	9	6	Chi., Burl. & Quincy R. R.
Halsey	Thomas	2,695	8	22.9		53	19	-15	5	44	0.68	-	0.24	2.0	3	9	18	4	U. S. Forest Service.
Hartington	Cedar	1,309	19	19.1	+ 0.6	45	19	-15	5	37	0.70	- 0.09	0.30	7.0	5	8	7	18	D. E. Ewing.
Harvard	Clay	1,812	21	19.6	-4.1	41	19	-14	5	39	0.46	0.00	0.31	3.9	3	15	7	9	Dr. J. T. Fleming.
Hastings	Adams	1,932	20	20.7	-4.1	47	29	-13	5	40	0.55	+ 0.41	0.45	8.0	3	12	13	6	Chi., Burl. & Quincy R. R.
Hayes Center	Hayes		17	25.5		58	25	-5	5	32	0.70	+ 0.26	0.60	7.0	2	19	7	5	C. A. Ready.
Hay Springs	Sheridan	3,821	23	21.6	+ 1.3	58	31	-23	3	47	1.10	+ 0.42	0.30	11.0	6	12	17	2	A. Kadlecik.
Hebron	Thayer	1,458	25	23.0	-1.0	45	19	-15	5	51	0.83	+ 0.09	0.50	7.0	3	11	7	13	Dr. C. M. Easton.
Hemingford	Boxbutte	4,256	1								0.37	-	0.11	9	1	1	1	1	A. S. Enyeart.
Hendley	Furnas	2,231	6								0.49	-	0.40	4.0	1	1	1	1	F. L. Jones.
Hillside	McPherson		1	21.3		49	25	-9	3	41	0.15	-	0.12	3.0	2	10	11	10	Mrs. M. R. Lloyd.
Holdrege	Holdrege	2,324	18	24.0	-2.2	56	31	-10	5	38	0.90	+ 0.48	0.60	9.0	3	18	0	13	Chi., Burl. & Quincy R. R.
Hooper	Dodge	1,228	13	20.8	-2.0	48	19	-18	6	30	0.17	- 0.15	0.15	6.0	2	15	7	9	W. Howard Heine.
Imperial	Chase	3,273	20	24.6	-2.5	60	31	-4	5	42	0.40	- 0.07	0.30	5.8	2	8	12	11	Robt. Malcolm.
Kearney	Buffalo	2,146	20	22.3	-3.7	53	23	-17	5	40	0.70	+ 0.22	0.40	7.0	2	15	6	10	N. C. Dunlap.
Kimball	Kimball	4,697	21	24.2	-3.0	62	25	-13	3	41	0.05	- 0.36	0.05	0.5	1	21	5	5	F. Bellow.
Kirkwood	Rock		15	20.2	-1.8	47	22	-18	5	37	0.95	+ 0.40	0.40	9.5	4	18	8	5	Mrs. C. Arter.
Kowanda	Deuell										0.49	-	0.40	4.0	1	1	1	1	Geo. W. Hulse.
Lexington	Dawson	2,385	21	22.4	-2.8	47	19	-16	5	39	0.65	+ 0.08	0.60	6.5	2	20	0	11	Robt. Chadwick.
Lincoln	Lancaster	1,159	31	21.8	+ 0.6	46	25	-13	5	33	1.15	+ 0.53	0.50	10.3	4	10	3	18	U. S. Weather Bureau.
Loup		2,067	16	21.0	-3.4	46	19	-15	5	51	0.30	- 0.58	0.40	11.0	3	23	5	3	E. S. Hayhurst.
Loyal	Custer		2								0.30	-	0.30	3.0	1	18	6	7	nw.
McCook	Redwillow	2,506	15	23.0	-5.3	56	31	-15	5	36	0.00	- 0.26	0.00	0.0	0	17	7	7	nw.
McCool Junction	York	1,575	12	20.5	-2.3	47	19	-13	5	33	0.70	+ 0.20	0.40	7.0	4	15	0	16	Dr. F. A. Long.
Madison	Madison	1,585	17	20.5	-2.3	47	19	-13	5	33	0.70	+ 0.20	0.40	7.0	4	15	0	16	John Ellis.
Marquette	Hamilton	1,830	31								0.55	- 0.02	0.30	5.5	2	2	2	2	Anthony Kennedy.
Mason City	Custer	2,257	9								1.00	+ 0.57	0.60	0.0	2	1	1	1	John Hull.
Minatare	Scottsbluff	3,825	1								0.80	- 0.53	0.40	8.0	4	22	4	5	Edwin K. Wieland.
Minden	Kearney	2,169	33	21.6	-0.9	49	23	-15	5	39	0.83	+ 0.03	0.36	8.5	7	8	10	13	Chi., Burl. & Quincy R. R.
Mitchell	Scottsbluff	2,202	2	22.3		50	24	-16	3	43	0.10	-	0.05	1.0	2	12	19	0	U. S. Reclamation Service.
Monroe	Platte	1,525	13								0.50	-	0.40	4.0	2	11	9	11	Wm. Webster.
Morrill	Scottsbluff	941	33	22.8	+ 2.2	49	19	-19	6	38	2.20	+ 1.40	1.10	22.0	3	13	7	11	Chi., Burl. & Quincy R. R.
Nebraska City	Otoe	1,532	27	18.5	-0.5	48	19	-17	6	47	0.55	+ 0.13	0.30	5.5	3	21	2	9	Dr. P. H. Salter.
North Loup	Valley	1,961	22	21.0	-1.1	50	31	-16	5	41	0.40	- 0.19	0.25	7.0	3	15	8	8	W. G. Rood.
North Platte	Lincoln	2,841	36	22.2	+ 0.8	57	31	-9	5	36	0.34	- 0.13	0.28	3.9	5	13	10	8	U. S. Weather Bureau.
Oakdale	Antelope	1,722	23	17.4	-1.5	44	31	-14	5	39	0.48	+ 0.01	0.21	5.0	3	11	10	10	G. S. Clingman.
Odell	Gage	1,278	16								1.05	+ 0.53	0.40	8.0	4	14	6	14	Chi., Burl. & Quincy R. R.
Omaha	Douglas	1,103	49	22.4	+ 1.9	48	19	-10	5	25	0.94	+ 0.29	0.50	6.9	7	7	11	13	U. S. Weather Bureau.
Ord	Valley	2,063	16								0.68	+ 0.33	0.32	3.0	3	11	9	11	James Milford.
Orleans	Harlan	1,993	2								0.50	-	0.40	4.0	2	10	6	8	James McGeachin.
Oscoda	Polk	1,644	12	20.4		40	19	-14	5	31	0.70	+ 0.41	0.40	7.0	3	22	4	5	G. T. Ray.
Palisade	Hitchcock		1								1.10	+ 0.69	0.80	11.0	2	19	6	6	E. E. Young.
Palmyra	Otoe	1,142	15	23.5	-1.7	48	19	-8	6	39	1.10	+ 0.69	0.80	12.0	3	13	7	11	Thomas Coles.
Pawnee City	Custer	1,175	24	2.2		55	25	-21	6	39	1.00	+ 0.13	0.60	4.5	3	19	3	9	Frank A. Barton.
Plymouth	Jefferson	1,419	6	21.9		47	18	-16	6	39	0.79	-	0.35	5.0	9	10	12	nw.	John Ruppel.
Purdum	Blaine	1,200	10	20.7*	-2.1	52	31	-21	5	37	0.90	-	0.50	9.0	3	16	7	8	T. C. Jackson.
Ravenna	Buffalo	2,028	33	21.4	-2.8	51	31	-14	6	43	0.81	+ 0.19	0.41	7.0	2	14	6	11	Erastus Smith.
Redcliff	Webster	1,687	18	22.7	-3.7	49	23	-19	6	38	0.54	+ 0.21	0.28	5.0	3	16	4	11	Chas. S. Ludlow.
St. Libery	Howard	1,887	15								0.80	+ 0.31	0.40	6.0	3	16	6	9	W. I. Meader.
St. Paul	...do.	1,796	16	22.0	-4.1	47	22	-16	6	37	0.89	+ 0.28	0.40	6.0	3	14	10	7	Paul Anderson.
Santee	Knox		13			53	31	-13	5	42	0.70	+ 0.13	0.30	7.0	4	21	0	10	E. G. Kendall.
Sargent	Custer		13			55	31	-13	5	42	0.70	+ 0.13	0.30	7.0	4	21	0	10	Jas. L. Ferguson.
Schuyler	Colfax	1,357</																	

TABLE 1.—*Climatological data for January, 1910. District No. 6—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, 0.1 inch or more.	Number of partly cloudy days.	Number of cloudy days.			
Iowa.																				
Afton	Union	1,212	16	22.0	-0.7	44	5	-13	6	29	1.40	+0.51	1.00	12.0	3	11	7	13	sw.	
Allerton	Wayne	1,513	8	23.2	.....	48	25	-19	6	32	1.71	.....	0.70	7.1	5	17	2	12	nw.
Alton	Sioux	1,335	5	15.0	.....	38	19	-29	6	39	1.45	.....	0.70	14.5	5	16	5	10	nw.
Atlantic	Cass	1,164	19	19.9	-0.5	44	19	-24	6	30	1.17	+0.41	0.51	6.0	4	8	10	13	nw.	
Audubon	Audubon	1,301	16	20.0	+1.1	39	15	-17	6	26	1.80	+1.15	1.30	17.0	3	16	2	13	nw.	
Bedford	Taylor	.....	10	21.5	-2.3	48	19†	-26	6	35	2.46	+1.36	1.20	17.8	9	15	4	12	nw.
Centerville	Appanoose	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chariton	Lucas	1,042	15	21.4	-2.3	45	25	-22	6	34	0.70	-0.62	0.45	4.0	2	14	0	17	nw.	
Clarinda	Page	1,009	20	20.4	-2.1	49	25	-22	7	45	1.73	+0.75	0.77	10.2	6	15	5	11	nw.	
Corning	Adams	1,117	18	19.9	-2.0	44	26	-26	6	35	1.30	+0.39	0.80	8.0	3	16	5	10	nw.	
Corydon	Wayne	1,101	17	22.7	-0.6	48	25	-19	6	33	1.69	+0.20	0.71	6.0	8	13	6	12	nw.	
Creston	Union	1,312	5	18.4	.....	50	29	-25	6	33	1.40	.....	0.80	.....	3	17	2	12	nw.
Cumberland	Cass	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Denison	Crawford	1,180	16	18.4	-1.9	43	19	-26	6	33	0.87	-0.37	0.60	8.2	3	16	3	12	n.	
Elliott	Montgomery	5	20.6	.....	.....	43	19†	-31	6	39	0.63	.....	0.50	5.0	2	13	3	6	nw.
Greenfield	Adair	17	19.2	-2.1	42	19	-19	6	28	1.44	+0.49	0.80	.....	3	17	3	11	nw.	
Hancock	Pottawattamie	1,113	5	20.6	.....	42	19†	-21	6	27	1.40	.....	0.60	6.0	3	18	4	9	nw.
Harlan	Shelby	1,192	11	18.8	-2.4	44	19	-27	6	34	1.00	+0.34	0.60	9.2	4	8	9	14	nw.	
Hopeville	Clarke	19	20.6	-0.8	44	19†	-20	6	33	1.66	+0.72	0.83	.....	7	8	11	12	nw.	
Inwood	Lyon	1,474	6	14.4	.....	42	19	-30	6	45	1.06	.....	0.35	10.3	5	14	8	9	nw.
Lamoni	Decatur	3	23.1	.....	.....	47	26	-16	6	32	2.20	.....	0.77	7.1	6	20	0	11	nw.
Larrabee	Cherokee	1,266	20	15.4	-2.0	39	19	-23	6	33	1.21	+0.67	0.57	12.2	6	12	8	11	nw.	
Le Mars	Plymouth	1,224	14	17.1	-2.1	37	19†	-19	6	35	0.73	+0.19	0.26	18.0	3	4	16	11	nw.	
Lenox	Taylor	1,250	15	21.2	-2.1	43	25	-16	6	28	0.88	+0.12	0.45	4.8	3	17	2	12	nw.	
Leon	Decatur	1,120	8	22.0	.....	45	25	-19	6	30	2.92	.....	1.00	12.8	9	10	7	14	nw.
Little Sioux	Harrison	5	20.0	.....	.....	47	19	-28	6	44	1.20	.....	0.90	10.5	3	13	7	11	nw.
Logan	.....	928	43	20.4	+1.1	46	19	-24	6	34	0.67	-0.43	0.40	.....	3	10	12	9	nw.
Masenat	Cass	4	19.6	.....	.....	43	19†	-26	6	31	1.93	.....	1.00	11.0	3	18	2	11	nw.
Mount Ayr	Ringgold	1,238	17	22.4	-0.9	45	19†	-21	6	32	1.39	+0.15	0.55	8.5	3	14	4	13	nw.	
Odebolt	Sac	1,356	13	18.6	-1.8	45	19	-19	6	29	0.96	+0.55	0.50	10.0	2	16	3	12	.....
Onawa	Monona	1,051	10	21.2	-1.4	42	22	-18	6	35	0.92	+0.26	0.35	9.1	5	15	3	13	nw.	
Pacific Junction	Mills	980	11	20.2	-3.1	44	25	-29	6	38	1.40	+0.86	0.65	7.7	4	13	10	8	n.	
Park Rapids	Lyon	1,358	11	14.8	-0.9	38	1	-21	6	31	0.60	.....	0.60	.....	4	13	9	13	nw.
Sheldons	O'Brien	1,422	10	14.7	-2.9	40	19	-23	6	36	3.15	+2.55	1.00	26.0	9	19	3	9	nw.	
Sibley	Osceola	1,212	17	12.9*	-2.0	39 ^a	19	-21 ^a	6	38 ^b	1.05	+0.51	0.50	10.5	4	16	1	14	nw.	
Sioux Center	Sioux	11	14.8*	-3.1	38 ^a	22	-20 ^a	6	34	1.55	+0.70	0.80	15.5	5	.....	.....	.....	.....	nw.
Sioux City	Woodbury	1,135	21	18.2	+2.6	42	22	-17	6	36	0.69	+0.14	0.39	9.6	4	4	12	15	nw.	
Thurman	Fremont	13	20.7	-3.5	48	25	-30	6	41	0.91	+0.27	0.52	10.2	4	9	15	7	nw.		
Washtka	Cherokee	1,157	12	15.8	.....	45	19	-34	6	42	0.55	+0.07	0.30	6.0	2	12	6	13	n.
Woodburn	Clarke	981	11	20.0	.....	48	26	-33	6	50	1.96	+0.82	0.80	9.0	5	15	3	13	nw.
Kansas.	Dickinson	1,157	15	.....	.....	.....	.....	.....	.....	.....	1.29	+0.57	0.88	4.7	4	13	11	7	sw.
Agricultural College	Riley	1,109	52	27.6	+1.7	58	25	-18	6	39	1.46	+0.66	0.75	6.5	3	16	10	5	sw.	
Alton	Osborne	1,651	8	24.2	.....	55	31	-18	5	38	0.67	-0.13	0.50	5.7	4	12	7	12	nw.
Atchison	Brown	973	19	26.6	-1.0	57	25	-10	6	28	2.15	+1.02	1.00	8.5	4	18	0	13	w.	
Baker	Mitchell	1,182	10	.....	.....	63	25	-8	6	44	0.37	-0.04	0.33	4.0	2	15	6	10	nw.
Blakeman	Rawlins	2,894	13	26.6	.....	63	25	-8	6	44	0.25	-0.04	0.22	2.0	3	16	5	10	nw.
Blue Rapids	Marshall	1,105	4	.....	.....	53	25	-13	6	32	1.54	.....	0.75	7.4	3	11	10	10	nw.
Centralia	Nemaha	1,256	1	24.8	.....	55	25	-22	6	40	0.73	.....	0.58	3.0	2	15	6	10	s.
Chapman	Dickinson	1,123	6	27.4	.....	55	25	-15	6	36	0.90	.....	0.50	4.0	2	10	4	17	nw.
Clay Center	Clay	1,203	9	26.0	.....	55	26	-17	6	36	0.90	.....	0.50	4.0	2	10	4	17	nw.
Colby	Thomas	3,138	19	28.0	-0.9	65	25	-10	5	36	0.18	-0.04	0.16	2.7	2	14	7	10	nw.	
Concordia	Cloud	1,398	26	25.5	+1.1	54	25	-10	6	29	0.59	-0.13	0.49	5.4	5	6	16	9	nw.	
Densmore	Norton	2,200	1	25.0	.....	62	25	-12	5	35	0.36	.....	0.31	3.5	2	17	6	8	nw.
Dresden	Decatur	2,731	16	27.1	-2.3	62	25†	-6	5	33	0.52	+0.21	0.52	4.0	4	15	7	9	nw.	
Ellsworth	Ellsworth	1,537	6	27.9	.....	61	25	-13	6	40	0.96	.....	0.45	4.5	4	13	13	5	s.
Enterprise	Dickinson	1,144	8	28.6	.....	60	27	-20	6	39	1.70	+0.98	0.90	6.0	4	7	13	11	s.
Eskridge	Wabaunsee	1,414	4	29.0	.....	59	25	-3	5	28	2.26	.....	1.10	5.5	5	11	9	11	s.
Farnsworth	Lane	2,850	9	30.1	.....	71	25	-13	5	44	0.36	.....	0.32	3.2	2	14	10	7	nw.
Ft. Scott	Bourbon	857	35	33.8 ^a	+0.9	69 ^a	25	-1	6	34 ^b	1.75	-0.21	1.00	4.0	3	16	1	14	sw.	
Frankfort	Marshall	1,146	16	25.2	-4.0	55	25	-26	6	43	1.35	+0.67	0.80	8.5	3	10	13	8	nw.	
Garnett	Anderson	950	4	.....	.....	64	25	-3	6	36	0.98	.....	0.50	4.2	5	15	8	8	s.
Goodland	Sherman	3,687	3	29.9	+0.1	61	22†	-6	4†	6	34	0.63	+0.25	0.50	0.0	3	16	12	3	nw.
Gove	Gove	2,750	21	29.9	+0.1	61	22†	-6	4†	6	34	0.63	+0.25	0.50	0.0	3	16	12	3	nw.
Hanover	Washington	1,225	13	25.4	.....	55	25	-16	6	34	1.27	+0.70	0.65	6.8	4	17	5	9	nw.
Harrison	Jewell	1,804	9	22.9	.....	48	19	-15	6	41	0.62	.....	0.28	4.5	3	19	2	19	nw.
Hays	Ellis	2,000	42	27.4	-2.7	64	25	-17	5	39	0.58	-0.03	0.55	5.0	4	9	15	7	nw.	
Hill City	Graham	2,134	2	28.2	.....	66	25	-11	5	40	0.30	.....	0.30	3.0	1	16	6	10	nw.
Horton	Brown	1,188	21	25.6	-1.5	46	25	-8	5	28	1.52	+0.54	0.85	6.0	4	17	2	12	nw.	
Hoxie	Sheridan	2,700	12	28.8	-0.9	66 ^a	25	-16	6	39 ^b	0.31	+0.01	0.25	2.5	2	18				

TABLE 1.—Climatological data for January, 1910. District No. 6—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.					Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Pervailing wind direction.
Kansas—Cont'd.																			
Wamego	Trego	2,456	27	29.0	-0.2	67	25	-10	5	38	0.35	-0.23	0.31	4.0	3	18	4	9	nw.
Wallace	Wallace	3,303	40	29.3	.....	70	24	-7	6	42	0.07	-0.17	0.07	2.0	1	8	16	9	nw.
Wamego	Pottawatomie	1,002	17	.....	.....	.....	.....	.....	.....	1.80	+ 1.07	1.15	6.5	3	11	9	11	nw.	
Missouri.																			
Amore	Bates	550	1	31.8	.....	66	25	-2	5	36	0.94	.....	0.45	8.6	4	12	5	14	sw.
Appleton City	St. Clair	553	20	31.4	-0.5	59	1†	1	6	28	0.75	-1.62	0.60	5.5	2	14	13	4	sw.
Arlington	Phelps	695	20	.....	.....	.....	.....	.....	.....	2.29	+ 0.42	1.27	T.	12	2	17	17	se.	
Arthur	Vernon	767	18	36.0	+ 5.0	72	25	1	6	38	1.97	+ 0.04	1.00	1.0	2	11	12	8	nw.
Avalon	Livingston	25	28.0	-0.4	58	25	-10	6	35	2.14	+ 0.20	1.30	8.0	5	17	6	8	nw.	
Bagnell	Miller	594	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bethany	Harrison	881	20	25.8	+ 0.7	57	27	-24	6	33	1.34	-0.14	0.74	7.0	5	14	4	13	nw.
Bolivar	Polk	1,070	22	35.4	+ 0.6	65	1†	4	6	39	1.57	+ 0.45	1.06	T.	4	11	10	10	sw.
Boonville	Cooper	600	34	.....	.....	.....	.....	.....	.....	2.36	+ 0.38	0.56	5.2	5	14	1	16	nw.	
Brunswick	Chariton	652	32	28.2	-0.3	60	25	-10	6	39	1.93	+ 0.22	0.72	6.0	7	15	2	14	nw.
Clinton	Henry	800	24	33.6	.....	69	25	0	6	30	2.05	+ 0.01	0.91	3.7	4	19	4	8	s.
Columbia	Boone	784	21	30.2	+ 3.0	62	25	0	6	30	2.36	+ 0.13	1.48	3.5	9	12	8	11	e.
Conception	Nodaway	982	26	25.0	0.0	53	25	-15	6	27	0.97	-0.13	0.50	7.0	3	10	10	11	nw.
Darkville	Randolph	826	19	29.8	+ 0.9	60	25	-7	6	37	1.87	-0.15	1.55	1.0	3	12	5	14	w.
El Dorado Springs	Cedar	759	5	37.6 ^a	.....	69 ^a	28	4 ^a	6	37 ^a	0.81 ^a	.....	0.51 ^a	T.	1 ^a	10 ^a	8 ^a	12 ^a	sw.
Fairport	De Kalb	920	16	.....	.....	.....	.....	.....	.....	2.50	+ 1.20	0.60	11.7	6	19	2	10	sw.	
Fayette	Howard	725	27	29.8	+ 2.0	61	25†	-3	6	30	1.93	-0.22	1.23	3.0	3	16	2	13	.....
Fulton	Callaway	818	19	32.2	+ 1.3	61	25	1	6	29	2.93	+ 0.27	1.83	3.0	7	8	11	12	w.
Gallatin	Daviess	803	18	.....	.....	.....	.....	.....	.....	2.10	+ 0.88	1.00	5.5	4	15	2	14	nw.	
Glasgow	Howard	618	33	.....	.....	.....	.....	.....	.....	1.68	-0.05	0.63	6.0	6	16	6	9	w.	
Grant City	Worth	1,130	18	24.3	.....	48	19	-16	6	35	1.20	+ 0.20	0.50	9.0	5	14	3	14	nw.
Harrisonville	Cass	912	38	29.0	+ 1.7	66	25	-5	7	37	2.65	+ 1.08	1.10	4.0	4	16	1	14	sw.
Hazelhurst	Livingston	17	.....	.....	.....	.....	.....	.....	.....	1.80	+ 0.50	0.90	4.5	6	12	5	14	w.	
Hermann	Gasconade	482	36	34.6	+ 0.3	68	1	3	6	38	2.80	+ 0.52	1.68	0.6	8	12	5	14	s.
Houston	Texas	1,280	18	34.6	+ 0.3	68	1	3	6	38	1.15	-1.20	0.55	T.	3	10	12	9	E. Dempsey.
Hunstville	Randolph	790	8	.....	.....	.....	.....	.....	.....	2.80	+ 0.52	1.68	0.6	8	12	5	14	F. H. Hammett.	
Jefferson City	Cole	628	29	29.8	-0.6	63	25	0	6	40	2.06	-0.30	1.08	5.3	5	18	1	12	w.
Kansas City	Jackson	963	21	30.6	+ 4.4	64	25	-4	6	35	2.06	+ 0.93	1.33	6.1	3	11	8	12	U. S. Weather Bureau.
Kidder	Caldwell	1,017	20	27.4	+ 0.7	57	25	-10	6	26	1.67	+ 0.32	0.62	5.5	6	18	5	8	nw.
Lamonte	Pettis	863	23	31.0	.....	64	25	-5	6	29	2.14	+ 0.37	1.27	3.5	5	12	10	9	sw.
Lebanon	Laclede	1,265	22	35.0	+ 1.4	65	25	5	5	35	1.73	-0.79	0.90	T.	3	11	8	12	w.
Lexington	Lafayette	813	27	30.1	+ 2.7	61	25	-4	6	30	1.72	+ 0.11	0.60	5.0	6	18	13	13	s.
Liberty	Clay	864	22	29.5	+ 0.8	61	25	-10	6	31	2.22	+ 0.85	1.12	5.5	3	16	5	10	s.
Lockwood	Dade	1,088	16	36.2	.....	69	25	6	7	31	1.69	+ 0.12	0.50	T.	3	12	7	12	nw.
Marshall	Saline	779	20	28.6 ^b	+ 0.1	64 ^a	25	-6 ^a	6	34 ^a	2.79 ^a	+ 0.91	1.85 ^a	4.5 ^a	8 ^a	13 ^a	4 ^a	13 ^a	Dr. W. H. Black.
Marshfield	Webster	1,492	2	37.3 ^b	.....	72 ^b	25	-8 ^b	7	35 ^b	2.00	.....	1.00	1.0	4	8 ^b	8 ^b	9 ^b	w.
Maryville	Nodaway	1,160	20	22.1	-1.3	41	10	-16	6	42	1.33	+ 0.16	0.85	10.0	3	19	3	9	n.
Mount Vernon	Lawrence	1,480	34	36.2	+ 1.3	70	25	0	5	41	1.05	-1.15	0.50	T.	4	11	10	10	nw.
Nevada	Vernon	860	16	.....	.....	.....	.....	.....	.....	1.80	+ 0.04	1.70	1.0	2	24	2	5	nw.	
New Palestine	Cooper	795	18	37.8	+ 4.4	66	26†	5	6	44	2.21	+ 0.28	1.85	4.2	3	16	5	10	sw.
Oregon	Holt	1,113	55	24.4	+ 0.8	52	25†	-15	6	27	1.93	+ 0.39	1.00	0.2	4	17	3	11	nw.
Oscoda	St. Clair	738	11	.....	.....	.....	.....	.....	.....	1.89	-0.67	0.67	0.2	5	17	5	9	nw.	
Rolla	Phelps	1,092	20	34.2	.....	67	1	2	6	29	2.18	-0.20	0.87	1.1	7	14	5	12	sw.
St. Charles	St. Charles	614	32	31.8	+ 0.6	60	1	3	6	30	2.51	+ 0.18	1.10	2.5	5	10	8	13	nw.
St. Joseph	Buchanan	825	39	26.6	.....	56	25	-13	6	25	1.67	+ 0.50	0.78	6.2	6	7	12	12	.....
St. Louis	Sublett	567	39	32.6	+ 1.6	61	1	3	6	25	2.73	+ 0.46	1.47	1.0	8	7	9	15	U. S. Weather Bureau.
Adair	Trenton	1,000	30	26.4	0.0	51	25†	-17	6	33	0.45	-1.28	0.40	4.5	2	8	10	13	Lewis Spriggs.
Grundy	Unionville	812	15	27.4	0.0	50	25†	-16	6	32	1.55	+ 0.13	0.79	3.5	4	14	1	16	J. H. Flesher.
Putnam	Warren	1,072	17	23.0	-1.4	54	26	-14	6	32	2.52	+ 0.47	1.35	7.5	7	13	10	8	nw.
Johnson	Benton	883	32	32.1	+ 3.7	68	25	-4	6	31	2.07	+ 0.28	1.09	1.5	6	12	7	12	Geo. W. Davis.
Warrenton	Warren	865	20	29.4	-0.1	59	25	0	6	38	2.81	+ 0.21	1.65	5.5	7	7	9	15	A. F. Smithson.
Warsaw	Benton	700	6	36.2	.....	78	25	5	6	41	2.03	.....	0.97	3.5	6	12	8	11	Dr. J. R. Smith.
Wheatland	Hickory	920	18	.....	.....	.....	.....	.....	.....	1.81	-0.22	1.50	1.0	3	17	5	9	s.	

^a, ^b, ^c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

* Precipitation included in that of the next measurement.

** Temperature extremes are from observed readings of the dry-bulb; means are computed from observed readings.

† Also on other dates.

‡ Separate dates of falls not recorded.

§ Data are from standard instruments not supplied by the U. S. Weather Bureau.

|| Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.

¶ Estimated by observer.

||| Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for January, 1910. District No. 6, Missouri Valley.*

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TABLE 2.—*Daily precipitation for January, 1910. District No. 6—Continued.*

TABLE 2.—*Daily precipitation for January, 1910. District No. 6—Continued.*

TABLE 2.—*Daily precipitation for January, 1910. District No. 6—Continued.*

TABLE 2.—*Daily precipitation for January, 1910. District No. 6—Continued.*

Stations	River basins.	Day of month.																													Total.			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
<i>Nebraska—Cont'd.</i>																																		
Minden	Blue	.30																																0.83
Mitchell	North Platte	.05	T.																														0.10	
Nebraska City	Missouri	1.10																															2.20	
Norfolk	Elkhorn	.20																															0.55	
North Loup	Loup	.10																															0.40	
North Platte	Platte	.01	.08	.20																												0.34		
Oakdale	Elkhorn	.21																															0.48	
Omaha	Missouri	.50																															0.94	
Ord	Loup	.27																															0.68	
Palisade	Republican																																	
Pawnee City	Blue	.40																															1.05	
Plymouth	Blue	.15																															0.79	
Purdum	Loup	.50																															0.90	
Ravenna	do	.40																															0.81	
Redcloud	Republican	.28																															0.54	
Saint Libory	Loup	.40																															0.80	
Saint Paul	do	.40																															0.69	
Santee	Missouri	.30																															1.60	
Sargent	Loup	.20																															0.70	
Schuyler	Platte	.20																															0.50	
Scottsbluff	North Platte	.03																															0.16	
Seward	Blue	.35	.22																														0.92	
Sheridan	Loup	.40																															1.10	
Sidney	South Platte	.30																															0.30	
Springview	Niobrara	.66																															1.10	
Stanton	Elkhorn	.50																															0.80	
Stratton	Republican	.30																															0.30	
Superior	do																																	
Tecumseh	Great Nemaha	.45	.15																														1.30	
Tekamah	Missouri	.50																															0.75	
Turlington	Little Nemaha	.80	.05																														1.25	
Valentine	Niobrara	.01	.02	.62	T.																											1.61		
Wahoo	Platte	.70																															0.90	
Wakefield	Elkhorn	.15																															0.42	
Walhill	Missouri	.05																															0.25	
Watertown	Platte	.35																															0.56	
Wauneta	Republican	.45																															0.00	
Weepingwater	Missouri	.56																															1.92	
Westpoint	Elkhorn	T.																																0.20
Wisner	do																																	
York	Blue	.40																															0.65	
Afton	Grand	1.30	.20																														1.40	
Allerton	Chariton	T.	.70																														1.71	
Alton	Floyd	.10	.50																														1.45	
Atlantic	Nishnabotna	.51																															1.17	
Audubon	do	.30																															1.80	
Bedford	Missouri	1.20	.40																														2.46	
Centerville	Chariton	.45																															0.70	
Chariton	Nodaway	.10	.77																														1.73	
Clarinda	do	.80																															1.30	
Corning	Chariton	.71	.07																														1.68	
Corydon	Missouri	.10	.80																														1.40	
Creston	do																																	
Cumberland	Nodaway	.60																															0.87	
Denison	Missouri	.50																															0.63	
Elliott	Nishnabotna	.50																															1.44	
Greenfield	Nodaway	.80																															1.40	
Hancock	Nishnabotna	.60																															1.00	
Harlan	do	.51	.03																														1.86	
Hopeville	Grand	.51	.03																														1.06	
Inwood	Big Sioux	.03	.30																														1.20	
Lamoni	Grand	.77	.62																														1.21	
Larrabee	Little Sioux	.06	.57																														0.73	
Le Mars	Floyd	T.	.22	T.																													0.88	
Lenox	Missouri	.45																															1.40	
Little Sioux	do	.30																																

TABLE 2.—*Daily precipitation for January, 1910. District No. 6—Continued.*

TABLE 3.—Maximum and minimum temperatures at selected stations, January, 1910. District No. 6, Missouri Valley.

Date.	Wyoming.												Montana.																	
	Basin.		Cheyenne.		Fort Laramie.		Lander.		Newcastle.		Pathfinder.		Sheridan.		Yellowstone Park.		Billings.		Dillon.		Havre.		Helena.		Lewiston.		Malta.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.			
1...	38	0	53	8	30	11	34	0	40	0	41	1	23	9	17	-12	46	5	35	2	1	6	4	-8	2	-9	5	-6		
2...	10	-8	15	-10	11	0	34	0	-29	3	-8	11	-6	-21	-3	-13	6	6	8	3	-13	19	19	-16	10	5	-5			
3...	6	-34	11	-10	8	-16	-9	-32	10	-21	4	-25	-4	-27	9	-10	-22	0	-21	8	-10	-31	14	-20	8	-15	10	-15		
4...	0	-18	9	-2	11	-14	9	-13	10	-6	8	3	12	-10	3	-14	-7	-20	10	-20	13	11	-17	12	-12	10	-11			
5...	4	-12	11	0	15	-11	7	-20	11	-6	8	3	17	-2	14	14	-12	14	-11	23	0	16	4	21	4	-3				
6...	0	-28	17	-2	21	-9	-4	-22	15	-3	7	-9	26	6	15	29	3	18	0	29	10	12	-4	22	0	27	0	0		
7...	11	-12	25	14	30	-4	19	-13	23	7	36	8	23	12	16	18	4	19	2	23	15	11	28	18	27	4	4			
8...	10	-19	29	9	30	2	13	-14	24	4	19	-2	30	20	20	23	10	24	6	32	15	11	26	12	13	-9	10			
9...	12	-21	39	9	30	-12	10	-14	34	0	27	17	20	12	24	12	8	30	7	28	6	38	15	16	-10	15	-11			
10...	2	-20	34	15	39	-6	9	-12	36	12	31	20	20	1	27	-1	31	5	22	20	6	28	19	15	15	-11				
11...	3	-20	40	14	33	-1	11	-8	38	10	37	22	24	12	22	1	27	-1	13	1	1	6	10	8	16	8	-16			
12...	13	-8	34	20	31	-6	13	-12	32	15	33	13	24	26	6	20	1	18	9	11	6	41	19	12	6	-11				
13...	10	-20	35	11	-2	5	-17	22	0	28	2	13	1	9	20	0	23	3	33	10	40	12	38	9	28	9	20			
14...	32	-11	46	15	24	-3	20	-12	40	6	39	29	29	28	28	10	23	12	31	9	24	8	33	15	37	15	15			
15...	35	-9	49	20	33	-3	37	4	42	18	39	24	30	34	17	37	2	32	12	33	12	36	18	35	19	35	9	35		
16...	30	-2	52	27	52	-4	39	17	45	24	40	19	35	6	33	5	34	6	30	10	29	4	34	16	32	20	22	5	5	
17...	22	-4	34	19	42	20	30	5	30	10	27	15	35	6	20	5	36	10	32	2	34	8	34	26	36	15	25	-6	0	
18...	24	6	42	23	44	14	34	9	34	8	30	13	52	23	23	15	34	15	33	14	46	25	45	23	46	0	0			
19...	23	6	46	24	49	28	43	12	46	20	32	26	44	21	29	14	42	22	33	12	40	26	36	18	35	19	44	27	27	
20...	26	-11	38	16	31	12	22	2	30	8	30	7	32	7	28	13	37	5	36	14	38	14	25	15	46	12	35	9	35	
21...	20	-12	52	16	50	7	33	0	40	7	39	21	47	3	35	15	34	8	40	20	49	31	43	14	45	22	35	13	35	
22...	32	9	50	40	53	15	49	16	42	18	41	29	52	29	36	30	40	32	48	27	52	52	40	51	32	49	28	35	20	35
23...	32	6	54	35	58	29	39	21	44	22	51	39	49	28	41	30	46	34	50	30	44	26	49	33	60	35	44	20	27	
24...	41	17	58	33	59	17	50	17	51	30	46	36	55	27	42	26	48	30	51	29	49	28	50	32	49	30	47	14	47	
25...	40	18	47	22	55	11	41	12	45	25	36	26	45	24	28	15	48	28	40	24	42	31	40	40	49	25	45	15	45	
Mns	20.4	-6.9	37.4	16.1	37.2	6.5	25.5	-2.0	33.0	9.1	30.4	13.8	31.5	7.3	23.7	7.8	30.0	9.0	30.8	8.7	31.6	13.1	27.7	11.2	35.4	14.8	28.8	5.7		

Date.	Montana.						North Dakota.						South Dakota.						Rapid City.								
	Miles City		Poplar.		Berthold Agency.		Bismarck.		Dickinson.		Jamestown.		Williston.		Aberdeen.		Chamberlain.		Huron.		Kadoka.		Lemmon.		Pierre.		
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
1...	12	-1	10	-12	42	5	28	-3	39	-7	34	-11	7	-8	9	6	40	34	3	43	0	31	-5	35	1	32	-3
2...	4	-12	6	-8	9	-5	6	-2	2	-8	9	-7	6	-6	10	0	0	4	-10	1	6	7	0	1	16		
3...	-2	-21	4	-24	-5	-13	2	-24	2	-22	12	-26	-1	-13	-9	-14	6	-10	4	-11	1	-16	1	-13	7	-13	
4...	6	-3	3	-14	-2	-21	-6	-22	-6	-14	13	-31	-2	-15	-4	-22	-2	-4	-9	4	-17	-7	-10	11	-13	21	5
5...	20	0	13	-8	4	-7	3	-13	6	-8	8	-12	12	-4	0	-10	13	-20	7	-10	11	-13	21	5	5	5	
6...	24	12	17	-1	16	-12	16	-12	14	-4	15	7	13	9	4	-21	18	2	-29	14	3	13	1	19	8	25	2
7...	25	14	18	-1	17	-7	12	-14	17	0	12	-8	10	-17	8	-18	27	-4	-10	-8	28	12	19	6	25	14	
8...	28	3	13	-22	-1	-30	2	-21	15	-18	11	-16	7	-15	-3	-19	23	0	-5	-15	24	9	18	-17	11	13	
9...	17	-3	24	-12	22	-3	10	-9	17	-3	4	-14	20	-12	20	-20	13	-5	4	17	-16	27	12	18	3	38	9
10...	16	8	24	-16	20	-23	16	-14	18	-8	7	-10	19	-11	15	-3	5	16	0	25	14	20	2	31	12		
11...	10	-7	12	-17	14	-16	14	-12	18	-6	4	-7	18	-15	22	-4	22	0	30	-1	23	4	23	3	35	15	
12...	20	5	10	-15	11	-18	18	-15	14	-10	10	-11	4	-18	28	-2	20	0	25	5	17	6	22	3	24	15	
13...	14	-3	14	-15	13	-19	13	-11	20	-10	10	-6	22	-12	13	-6	24	23	26	3	26	1	22	0	24	5	
14...	34	6	37	2	30	-3	28	-8	25	1	8	-17	32	-17	15	-3	22	17	13	5	23	23	26	1	8	50	3
15...	31	7	33	4	36	-4	25	4	34	15	23	5	32	-3	29	34	-17	28	8	34	14	31	8	32	16	52	20
16...	24	4	20	0	15	-9	15	-4	21	0	18	-2	12	7	27	8	34	13	32	4	42	13	19	5	50	25	
17...	32	3	10	-22	15	-10	16	-6	21	-5	18	-1	12	9	20	-6	10	15	21	2	38	11	30	4	34	21	
18...	44	14	40	-10																							

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TABLE 3.—Maximum and minimum temperatures at selected stations, January, 1910. District No. 6—Continued.

Date	South Dakota.						Colorado.						Nebraska.												North Plate.	Oakdale.	Omaha.							
	Sioux Falls.			Watertown.			Yankton.			Denver.			Wray.			Alma.			Bridgeport.			Grand Island.			Hay Springs.			Hebron.			Lincoln.	North Plate.	Oakdale.	Omaha.
	Max.	Min.	Max.	Min.	Max.	Max.	Min.	Max.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.						
1.	30	-2	30	1	44	5	58	20	46	19	37	19	33	10	42	32	35	0	37	20	36	11	37	7	32	4	36	13	13	10				
2.	12	-4	6	-1	8	0	20	13	19	8	10	3	4	4	4	10	-3	20	8	13	9	10	1	7	-	13	11	11	10					
3.	10	-11	6	-15	6	-5	13	6	11	1	15	5	10	-14	14	0	8	-23	15	3	11	4	14	-3	3	-3	6	1	2					
4.	0	-15	-4	-21	0	-12	12	3	10	2	7	1	9	2	5	-2	8	-16	6	1	5	7	4	3	3	6	-2	6	-10					
5.	0	-18	-3	-14	4	-16	21	-7	15	-7	20	-17	16	-1	14	-9	-12	-14	15	9	-13	19	-9	6	-14	6	6	6	-10					
6.	4	-21	6	-20	10	-15	25	0	25	-3	21	-15	18	-5	18	-12	15	3	17	-15	12	-8	17	-7	17	-11	11	-10						
7.	25	-3	10	-7	28	-2	34	8	36	-2	26	-8	35	-5	33	-10	30	5	24	0	24	6	26	6	29	1	25	0						
8.	11	-15	6	-15	14	-7	38	15	31	-7	28	-5	34	-4	22	-3	32	12	24	5	29	5	30	5	31	9	9							
9.	20	-15	15	-12	23	4	39	11	30	-2	28	-5	30	-2	30	-12	25	6	23	4	27	5	30	1	25	4	19							
10.	20	0	15	-7	21	6	35	15	42	5	31	15	34	0	20	20	40	0	38	19	39	21	32	6	23	38	19							
11.	28	5	30	1	22	2	36	14	27	5	26	5	29	6	24	7	30	10	26	14	25	12	25	6	24	3	29	10						
12.	27	18	21	13	28	4	44	15	30	11	27	23	32	12	27	30	22	14	34	23	27	21	23	18	36	3	31	19						
13.	29	9	21	14	36	16	36	16	25	7	30	20	28	10	27	19	28	12	25	18	27	14	30	5	24	0	9	21						
14.	28	7	18	10	14	4	34	15	26	3	22	2	25	6	25	2	29	1	18	5	20	12	23	3	25	5	19							
15.	30	8	21	7	30	14	50	20	27	22	30	19	35	8	35	23	35	10	33	17	33	20	28	20	29	11	34	19						
16.	25	10	31	26	37	16	61	35	48	9	36	30	43	7	35	31	48	14	35	32	36	31	34	20	36	22	35	31						
17.	20	-2	30	7	23	9	30	26	39	20	33	21	36	20	32	19	45	20	34	22	35	21	35	16	28	13	35	21						
18.	25	10	18	0	36	5	58	29	49	11	41	14	42	20	40	20	43	12	38	18	39	20	40	16	37	12	35	20						
19.	45	18	18	14	49	28	52	29	49	20	43	10	50	15	46	24	45	20	45	24	45	26	40	18	43	27	48	28						
20.	30	12	31	13	37	15	39	19	41	20	38	19	38	15	34	26	35	10	35	29	37	21	33	12	33	13	38	20						
21.	36	14	22	-2	24	8	58	18	47	11	37	4	44	5	34	8	38	0	35	13	30	14	34	7	28	4	28	15						
22.	39	16	36	9	43	19	59	40	51	27	40	9	52	32	43	14	42	16	38	16	40	15	41	18	39	20	38	20						
23.	38	10	31	17	37	22	61	42	55	32	51	26	58	28	44	27	53	20	44	31	39	26	47	30	36	23	38	27						
24.	25	7	24	12	32	20	64	34	60	30	40	26	62	30	40	28	55	30	40	23	38	33	46	27	35	19	35	16						
25.	40	18	32	21	35	24	54	29	61	30	46	26	52	22	42	28	59	20	44	29	46	31	47	23	35	24	47	34						
26.	40	20	30	22	35	25	46	30	49	28	47	33	40	20	41	36	36	18	44	36	41	31	41	24	37	23	39	32						
27.	40	10	30	12	34	23	38	25	40	25	42	26	36	17	42	25	33	17	41	27	40	27	40	18	37	27	37	27						
28.	30	12	21	7	27	15	54	35	49	17	45	26	47	17	47	26	45	16	48	33	44	23	33	11	31	10	30	16						
29.	36	9	21	14	29	12	45	24	38	15	34	26	40	15	34	18	35	15	35	23	37	17	36	10	20	4	24	16						
30.	24	0	13	9	28	10	53	26	51	18	38	7	50	15	30	6	45	-2	27	10	33	7	46	10	26	7	28	13						
31.	40	14	32	2	41	13	64	30	64	26	52	20	45	14	34	14	58	25	40	12	37	4	57	26	44	5	34	16						
Mns.	26.0	3.9	21.6	4.2	26.4	8.5	43.2	20.1	38.4	13.4	33.3	12.4	36.5	10.7	30.9	14.9	34.3	8.8	30.6	15 ^b	29.8	13.9	32.7	11.6	26.7	8.1	29.2	15.5						

Date	Iowa.						Kansas.						Missouri.						Columbia.	Kansas City.	St. Louis.	Unionville.					
	Valentine, Nebr.			Clarinda.			Sibley.			Colby.			Concordia.			Salina.			Topeka.			Wamego.					
	Max.	Min.	Max.	Min.	Max.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.									
1.	45	0	39	18	21	18	36	8	49	21	41	12	41	28	43	18	44	25	46	29	46	25	61	37	40	6	
2.	3	-8	18	10	9	2	10	6	-5	12	5	15	8	15	11	28	12	15	25	9	20	16	37	25	20	13	
3.	8	-11	14	4	-1	7	6	-5	13	4	-6	11	-1	3	12	-8	16	7	-1	8	23	16	19	29	17	16	10
4.	4	-25	6	-1	1	-15	4	-6	13	-10	13	-1	3	12	-8	12	-3	21	-10	29	13	16	10	32	1	1	
5.	13	-18	6	-13	-1	18	-18	-12	18	-10	13	-7	14	-8	12	-3	21	-10	25	3	11	-2	34	11	4	-6	
6.	15	1	10	-21	2	3	-17	21	-4	16	-10	17	-15	15	-5	23	0	12	0	14	13	3	-2	-14			
7.	27	12	23	-22	19	-16	29	-7	32	32	6	26	6	26	2	31	7	32	1	35	5	31	7	34	-13		
8.	28	5	23	-10	14	-7	17	2	32	10	24	9	22	13	34	-4	34	11	36	21	37	19	29	25	-4		
9.	29	2	22	-4	20	-18	19	8	32	3	32	4	33	3	31	4	35	9	29	10	31	17	20	-4			
10.	29	5	39	0	30	8	26	12	34	15	42	23	41	24	41	26	35	23	43	21	36	18	40	8			
11.	29	11	35	14	26	0	24	5	28	8	30	16	40	21	41	32	30	13	42	35							